

A New Courthouse for Tiffin Ohio

An Honors Thesis

by

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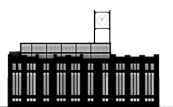
May 2012

Abstract

In May of 2004, the historic Seneca County Courthouse in Tiffin Ohio was vacated entirely. County commissioners deemed the 1884 Beaux Arts courthouse obsolete and unsafe, and all court functions were moved to other locations. The plan was to renovate the courthouse and link it with the new neighboring annex, so it could continue to serve as the centerpiece of the city and the justice system for another 120 years. But there were problems. The money was not available for renovation, the building was in worse condition than thought, and the cost of renovation was more than initially expected. Tax levies to raise the funds were continually voted down by the citizens, and the building remained empty and unusable.

The abandoned building was threatened with demolition an uproar from concerned citizens ensued. Detailed plans for renovation were drawn up, studies were done, and the demolition was prevented time after time. However, funds were never secured, and in January 2012, almost 8 years after the building emptied, it was finally torn down, with the claim that it was the most practical solution. Now there are other problems. There is still no plan in place to replace the old courthouse, and the local court system is spread throughout the town in buildings that are not designed to house it.

As a senior architecture student and a native of Tiffin Ohio, this project grants me the opportunity to propose a solution for downtown Tiffin, and design a structure that serves the programmatic needs of the Seneca County justice system and fits beautifully within the urban fabric of Tiffin. I have researched the history of Tiffin and the old courthouse, spoken with citizens of Tiffin to better understand their perspectives on the situation, analyzed the site in its context, and established a program for the new courthouse. I designed a building with the ability to evolve and to be sensitive to the environment. Finally, I will present this project in the form of graphics and a physical model to anyone else who has an interest in the project.



Acknowledgements

First and foremost, I would like to thank Dan Woodfin for advising me throughout this project. He volunteered his time every single week to help me through this ambitious project, and he was enthusiastic about it from start to finish. I have learned more about courthouse design through working with Dan on this project than from anything else. It is because of him that I feel sure my design would work in the real world.

I would like to thank Mike Kelbley, Mark Hayes, and Michael Lange for taking the time to converse with me about Tiffin's former courthouse, and the present situation in Tiffin. Because of them, I have gained a better idea of how to design.

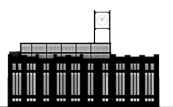
I also must thank Aaron Post, Nick Dutro, and the Advertiser Tribune for publishing a front page article about my project on April 8, 2012, as this greatly increased awareness of my project.

I would like to thank countless others who have critiqued my work and given me advice, or gave me helpful information.

Finally, I would also like to thank my parents for critiquing my writing, for analyzing my work from the perspective of non-architects, and for encouraging me throughout this long and arduous project.

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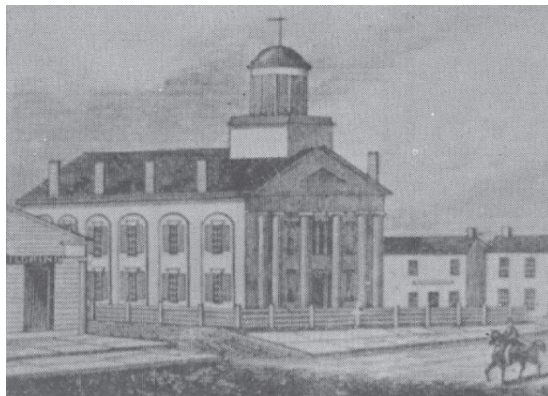
Background

Tiffin is a town of 17,963¹ people, and is the county seat of Seneca County in northwest Ohio. The town was established as the county seat in 1821² along the Sandusky River and it remained a small rural town until the Civil War. The first of three courthouses was built in 1836³. It was the first public building in Seneca County and was rebuilt 5 years later after a fire. After the war, the industrial revolution arrived in Tiffin in the form of industry and railroads, allowing the town to grow rapidly. National Machinery and Tiffin Glass, two of the largest businesses to establish roots in the town, arrived in Tiffin in 1882 and 1889, the same decade in which the recently demolished 1884 beaux arts⁴ courthouse was completed.

(left) the first Seneca County Courthouse 1836-1841

(right) the second Seneca County Courthouse, 1841-1884

(bottom) the first National Machinery factory building in the late 1800s



<http://www.historynotebook.com/Court.html>



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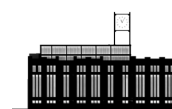
<http://www.nationalmachinery.com/aboutus/history.php>

¹ 2010 United States census

² Stephen Hartzell, History of Seneca county

³ Stephen Hartzell, History of Seneca county, 1833

⁴ A style of architecture popular in the US from 1880s-1930s, featured classical elements such as stone, columns, strict proportions, symmetry, and much ornamentation



The courthouse was designed by Elijah E. Myers (below), a well-known architect who also designed 3 state capitals and the parliament building in Brazil⁵. It was part of a flourish of monumental courthouses built throughout Ohio in the late 1800s—54 of the 88 Ohio courthouses today were built before 1900⁶. In the 1940s, the original tower (below left) was dismantled because the structure of the tower was deemed unstable, and was replaced by a more massive art deco tower (near right). Plans called for the entire structure to be renovated in an art deco style, much like the Erie County Courthouse in Sandusky Ohio (far right), but these plans were averted⁷ when funds ran out. The courthouse remained mostly unchanged on the exterior up until the 2000s.

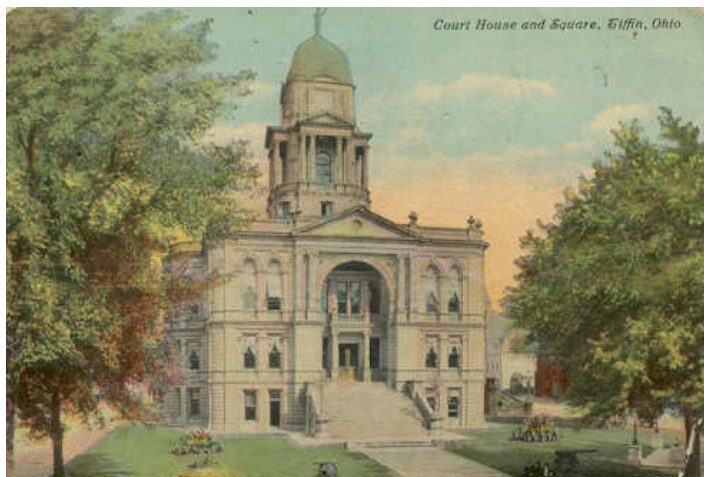
Meanwhile, Tiffin thrived as an industrial town through the first half of the century. But the onset of the automobile and the demise of local railroads set in motion the gradual decline of Tiffin industry and today it is hampered by the lack of truck friendly 4 lane highways throughout the county. Tiffin reached its peak in population around the year 1970, at over 21,500 citizens⁸. That number has since been on a slight, but constant decline, as major industries have closed or moved out; the largest employer in the county today is the local hospital. Over these three decades of shrinking population, the courthouse received little attention in terms of maintenance and renovations such that by the 2000s, the courthouse was seen as significantly outdated.

⁵ Groth, Kimberly, 1884 Beaux Arts Courthouse, Tiffin OH.

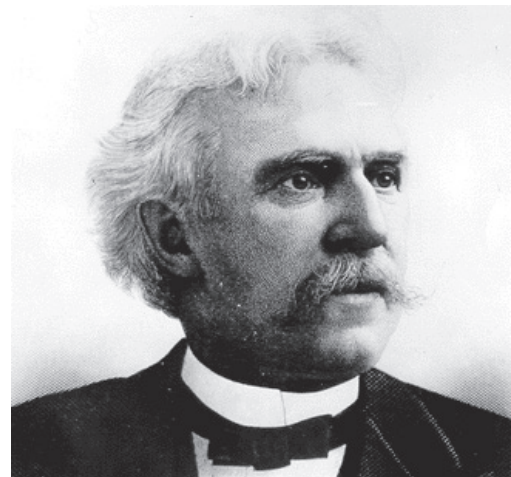
⁶ Thrane, Patterson, Courthouses of Seneca County

⁷ Perhaps this was fortunate because the aesthetics of the art deco tower have been criticized to this day

⁸ 1970 US census



<http://www.historynotebook.com/Courthouse-Rally.html>



<http://www.colorado.gov/dpa/doit/archives/cap/myers.htm>





<http://www.urbanohio.com/forum2/index.php/topic,13139.0.html>

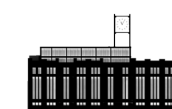


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It was a classic example of brushing aside the problem until it became too big to ignore, at which point it was considered not correctable. Historic preservation received less attention in the 1970s, and 1980s than it does in the new millennium. A thorough and sensitive renovation would have been logical and not as costly in the 70s or 80s; if that had happened, demolition today would be unimaginable. Instead, quick fixes—such as lowering the ceiling of the main courtroom by half and using a stark drop ceiling to fit the law library above it (shown on next page)⁹—had done little to bring the courthouse up to date, or to improve the overall quality of the building. By 2004, when the court system moved out the building, renovation of the courthouse was deemed too costly. The most practical solution to the courthouse situation, at least in short term, was thought to be to tear it down and replace it with a simpler, modern building.

Naturally, the plan to demolish the courthouse in favor of a new building encountered resistance. The building was put on the National Register of Historic Places and the list of Ohio's Most Endangered Historic Sites on four occasions. Never before had a county torn down a courthouse that was on the National Register of Historic Places and many citizens feared Seneca County would be the first. Preservationists and concerned citizens made themselves heard, claiming that demolishing the courthouse would be a tragedy, and that the courthouse not only has enormous sentimental value, but equally enormous indirect economic value

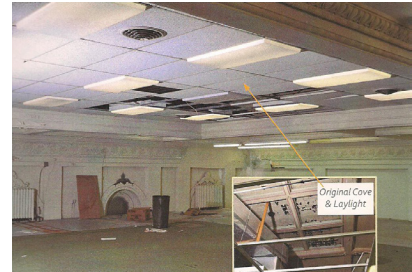
⁹ Thrane, Patterson 105





Seneca Redevelopment Group p 24

Courtroom before renovation



Seneca Redevelopment Group p 24



Seneca Redevelopment Group p 24

The upper and lower half of the courtroom after renovation

for the city. They had good reason to be incensed. Many other Ohio counties have used the renovation of their courthouses to spearhead other improvements throughout their downtowns. These improvements would often attract businesses back to a town's downtown district, and stimulate the local economy. Those in favor of keeping the courthouse had reason to believe that renovation, in the big picture, may in fact be the most practical solution in Tiffin OH.

After the courthouse was vacated, taxes to raise funds to renovate the courthouse were put before the citizens of the county, and it were voted down¹⁰. Without funds or the majority support of the county, demolition was all but assured. Lawsuits ensued, with angered citizens claiming that the registered historic building could not legally be torn down. The case went to the Ohio Supreme Court and demolition, at least for the time being, was delayed. In 2009, The Seneca County Courthouse and Downtown Redevelopment Group worked with the Board of Commissioners and developed a detailed portfolio of renovation plans for the courthouse, complete with structural analysis, an audit of existing conditions, breakdown of budgeting, schedule, and a plan for paying for the renovation through a series of grants and loans¹¹. This was presented to Seneca County in late summer of that year, with the promise of funding, but

¹⁰ Interview with Michael Lange

¹¹ Seneca Redevelopment Group 33-40

without anything secured yet. For whatever reason, the restoration project never progressed beyond this point, and the courthouse sat vacant for another two years, while any levies for renovation were voted down. The commissioners tried to proceed with what they considered the most cost effective solution—tearing it down and replacing it with a simpler building—while preservationists and county citizens who supported renovation blocked them at every turn, asking for just a little more time to secure funding.

It is difficult to understand just why most citizens of Tiffin and Seneca County were so apathetic about their own courthouse. Time after time, modest tax increases to pay for the courthouse were voted down. In talking with some citizens, their thoughts were that “nobody actually expected it to ever come down,”¹² that the fight over it would never end and that nothing would ever get done. Perhaps many citizens just never appreciated the historic value of the building and could not care less if it stayed or not. Still others may have dismissed the proposed renovation costs as underestimates, and the economic benefits as exaggerations or wishful thinking. Whatever the reasons, those in favor of restoring the courthouse, no matter how zealous, were always the minority. Those who fought for the courthouse had to fight a constant uphill battle that only became steeper, and in the end was too steep to overcome. The courthouse finally came down in January 2012.

At the present time, there is still no plan in place to replace the courthouse, nor is there a specific plan to fund such a project. Many requirements mandated by the Supreme Court of Ohio continue to be unmet by the court facilities, which continue to operate in facilities that are inadequate or not handicap accessible. There are plans to make the former courthouse site into a public green space that could very well be temporary, but in the short term, it will at least make that space a much more pleasant site than the dirt lot it is now. Meanwhile, several county locals have written the local newspaper with ideas about what to do with the space now that the courthouse is gone, and my project is one of these ideas.

¹² Interview with Mark Hayes



Design Intent, Approach

My original intent in the project was to design something beautiful for downtown Tiffin in place of the courthouse. Whether it was a new building, a monument, or a landscape feature, I felt that my proposal should be unique from the architecture of the old courthouse, to signify that Seneca County is moving on from its recent dubious past. At least part of the courthouse site, I felt, should be turned into a public park, and provide an inviting place for people to visit, have lunch, or have festivities. As far as replacing the old courthouse, I feel that the new building must be environmentally friendly, and be as close to a net zero carbon building as possible. A large part of designing for sustainability is designing a building that can evolve and easily adapt itself to any number of different uses, and thus avoid the same fate as the old courthouse, and the waste resulting from its demolition. A new building must be able to evolve and remain state of the art for many years into the future. A major issue of the old courthouse is that it was not designed for air conditioning or computer technology, and the cost of refitting the building was enormous. In terms of cost, the new courthouse and all accompanying improvements to the site are targeted at \$8 million, which is \$5,000 more than the cost of the proposed renovation¹³.

¹³ The Seneca Redevelopment Group

Site Analysis

The site analysis began by talking with a few citizens of Tiffin who have a connection to the courthouse story. Common Pleas Judge Mike Kelbley and Councilman Mark Hayes took an unbiased stance on the courthouse demolition, but they gave honest explanations of the current situation in Tiffin. They spoke about the buildings that currently hold court functions, the need for new justice center that could be a combined city-county justice center, and what they would like to see from a new courthouse. Michael Lange, a lawyer and Tiffin native, gave a detailed account of the recent history of the courthouse, and in a letter to the editor, stated that the entire space once occupied by the courthouse should become a public park. In a city council meeting that I attended on March 5, 2012, the Seneca County Port Authority raised the possibility of building a new combined justice center, then leasing it to the city and county. Through all these meetings, it became clear that people in Seneca County have ideas of what a new courthouse should be, but at this time, nothing official has been developed.



Develop courthouse space

January 20, 2012
The Advertiser-Tribune

Save |

Returning home from Cleveland last Tuesday night, we stopped at courthouse square and observed the ongoing removal of the old courthouse. I thought, regardless of the goodwill and sincerity on both sides, we must get on with the planning of the use of the property.

We all agree that, in the future, when financing is available, a new addition to the courthouse will be built. I would suggest to the commissioners the following:

1. Build the new courthouse to the east, either where the ruins of East Junior High stands or directly east in the block where the old commissioners' office stands.
2. Develop the area of the removed courthouse facility and present "front lawn" facility into an outstanding downtown park.

Development of the new court facilities to the east would give juvenile/probate court new space and "cluster" the courts into a downtown campus-like facility with plenty of adequate parking. The ruins of East Junior High School have been standing for possibly a decade, undeveloped, and should be available at a reasonable price to the county.

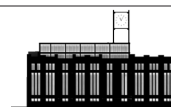
I would propose the west lawn of the old courthouse and the area of the removed facility be developed into an outstanding park. This could draw interest to the rebirth of downtown Tiffin. The park could be designed for a band structure "gazebo" and other facilities to attract the Tiffin jazz festival and related activities. Spring and summer could provide tables for afternoon "brown bag" lunches.

I think a \$1,000 prize for the best park design would attract many art-oriented students from Heidelberg University, Tiffin University and elsewhere. If the park design contest were authorized by the commissioners, I believe I can find a sponsor of the \$1,000 prize.

Some suggestions from someone who appreciates the possibilities of a growing downtown Tiffin.

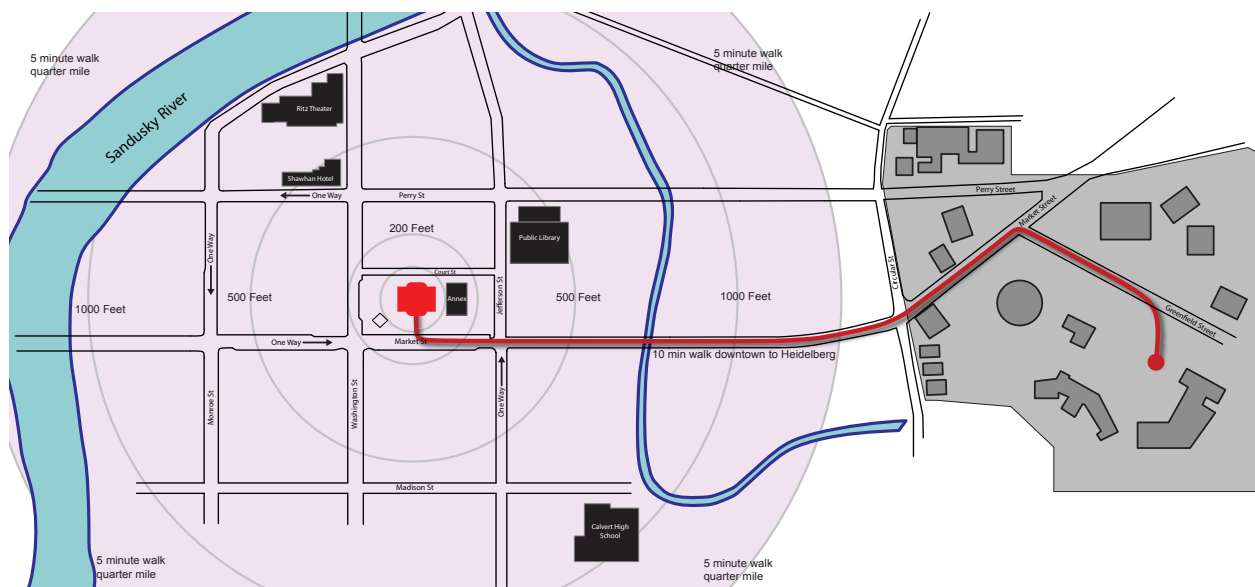
Very truly yours,

Michael B. Lange, Tiffin





After researching the story behind the courthouse, and how that story is unfolding right now, I had a better idea of what to look for in my analysis of the site itself. I began by looking at what lies within a quarter mile of the old courthouse, the typical distance that one can travel by foot in five minutes¹⁴, and found this radius encompasses almost all of downtown. The Ritz Theater, former Shawhan Hotel, the Sandusky River, the public library, and Calvert High School all lie within the five minute radius. In addition, most law offices are less than five minutes away, and even some residential areas are an equally short walk. Even the centers of Heidelberg University, which is only a ten minute walk from the courthouse, and Tiffin University, which is only a 20 min walk, are reasonable distances on foot.



Additional analysis shows that Washington Street, running north-south is the busiest street in Tiffin, and the two one-way streets running east-west, Perry and Market Streets, are the second busiest, which means the courthouse space is possibly the most viewed space in town. The density of buildings immediately surrounding the courthouse block is desirable, but buildings become much sparser only a block away. Also, what little green space exists downtown is either underused—in front of the old courthouse—or undeveloped—around the former junior high.

¹⁴ Botchway, Trowbridge and Grimm



Buildings in Downtown Tiffin
Fairly dense, not crowded



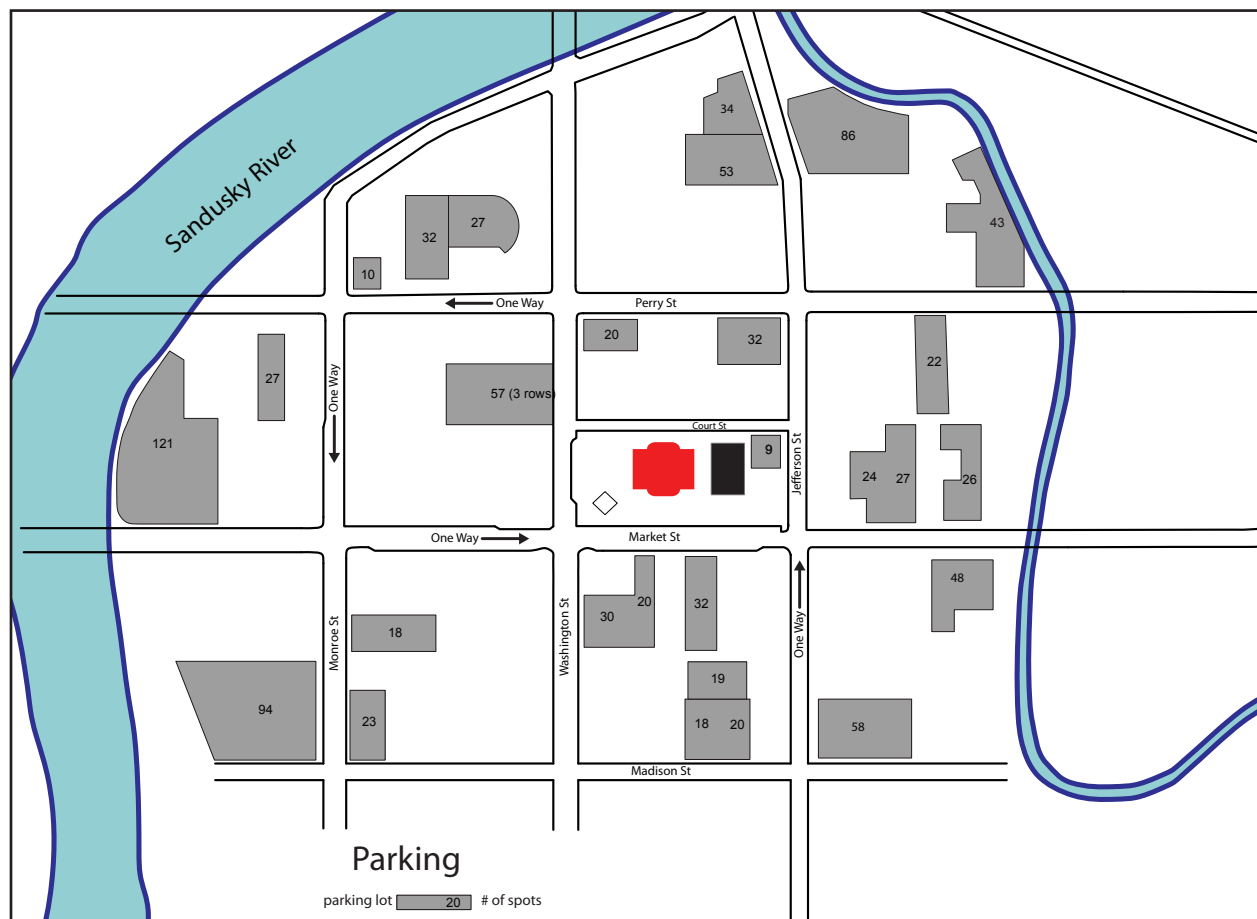
Traffic Patterns in Downtown Tiffin
thicker the line, the busier the road



Green Space in Downtown Tiffin
Much of it is undeveloped space by old junior high



Parking is something that is plentiful in downtown Tiffin, enough that the courthouse has never needed its own parking lot and probably never will. At least 800 public parking spaces are within a five minute walk of the courthouse. This number swells to 1000 or more if church and high school lots are included. This does not even include numerous parallel parking spaces. Two of the large parking lots are within unobstructed view of the courthouse. The lone concern brought up would be if a new combined justice center is built, then parking would be difficult on Monday mornings. However, parking should be difficult at this time because downtown parking lots designed for maximum loads will ruin a town's density. Another remark is the difficulty in finding parking near the Ritz Theater for large shows, but that may be a benefit, because people will have to walk through downtown to travel from the car to the theater, and would more likely visit local businesses.



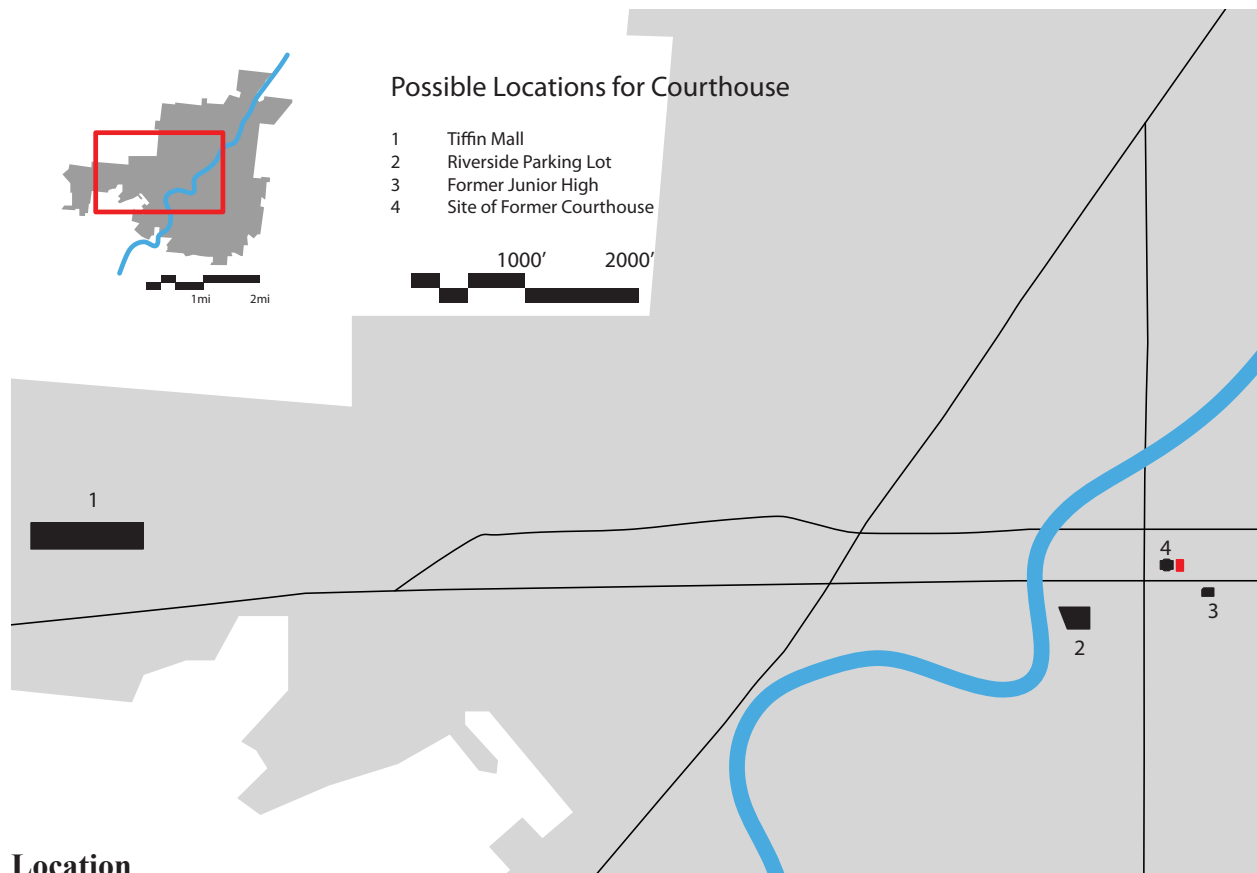
Architectural Decisions

Early Concept

In my initial approach to the project, I did not even imagine designing a building, but instead, I suggested placing the entire justice center into the unoccupied second and third levels of all the existing buildings that look out to the space where the courthouse once stood. The idea was conceived as a large scale courtyard design that would leave the site of the old courthouse as a park, and would involve no new construction, but instead renovation of existing buildings. The park would feature an amphitheater and band shell, and a playground, constructed primarily of steel and glass to reflect Tiffin's industrial heritage. However, Tiffin's two busiest streets would run right through the site, plus dividing the court functions among several buildings would leave them so disjointed that that court situation would be no better than it is now.

Another issue brought up is the Seneca County court system needs a place to call home, someplace identifiable as the seat of government, especially now that the county courthouse gone. Thus it became clear that satisfying the needs of the justice system meant far more than just dispersing among nearby buildings. It meant that a new courthouse has to be built someday, and so the next step in my project was to establish the site for the new courthouse.

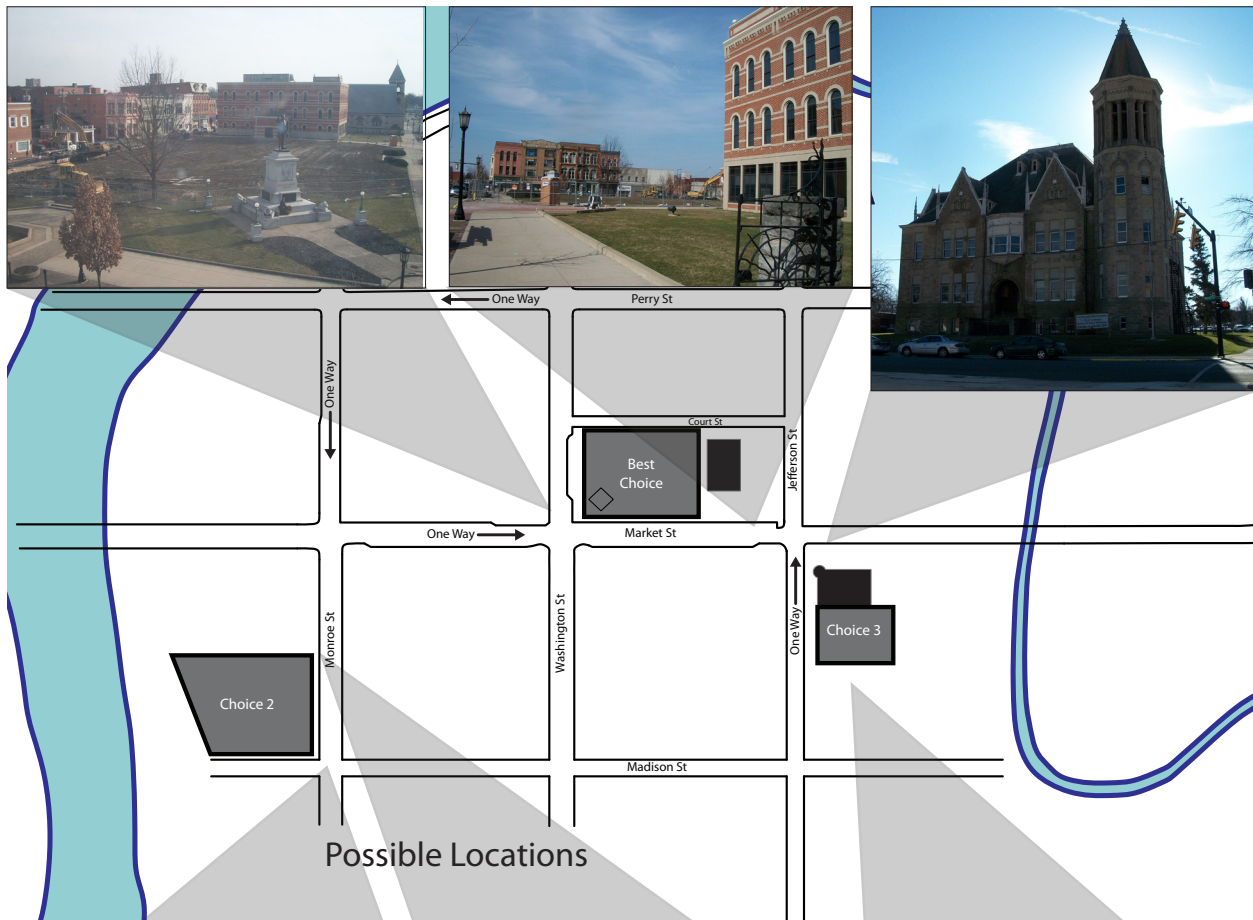




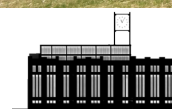
As the courthouse came down, and the space it once occupied began to open up visually, several citizens commented that the space looks better, and many felt a public park should occupy that space while a new courthouse is placed elsewhere. One option is to move all court facilities to either a new building or renovated building at the half-occupied Tiffin Mall, which is located on the western edge of town, but that was dismissed as such a move would be a death blow to downtown Tiffin. Two blocks southeast of the old courthouse is a massive underused parking lot, which sits next to the river. However, this would be off the major streets of Tiffin, plus it would separate the annex and the new courthouse by several blocks. The old junior high, vacant since 2003, sits on the corner of Jefferson and Market, one of the major streets and has already received attention from the city. It has the monumentality of the old courthouse, lies in close proximity to the annex, and has plenty of land around it on which an even larger addition could be built. However, the cost of renovating the junior high could exceed that of the old courthouse, and if Tiffinites did not support renovating a courthouse they already had, how can



they be expected to support renovating a building that was never a courthouse? A less costly solution could be to renovate and occupy only the first floor of the junior high, super-insulate the upper floors, and build a modern addition to the back of it. I still think this should remain an option, if not for the courthouse, then at least for some other time when a large scale building is needed in downtown Tiffin.

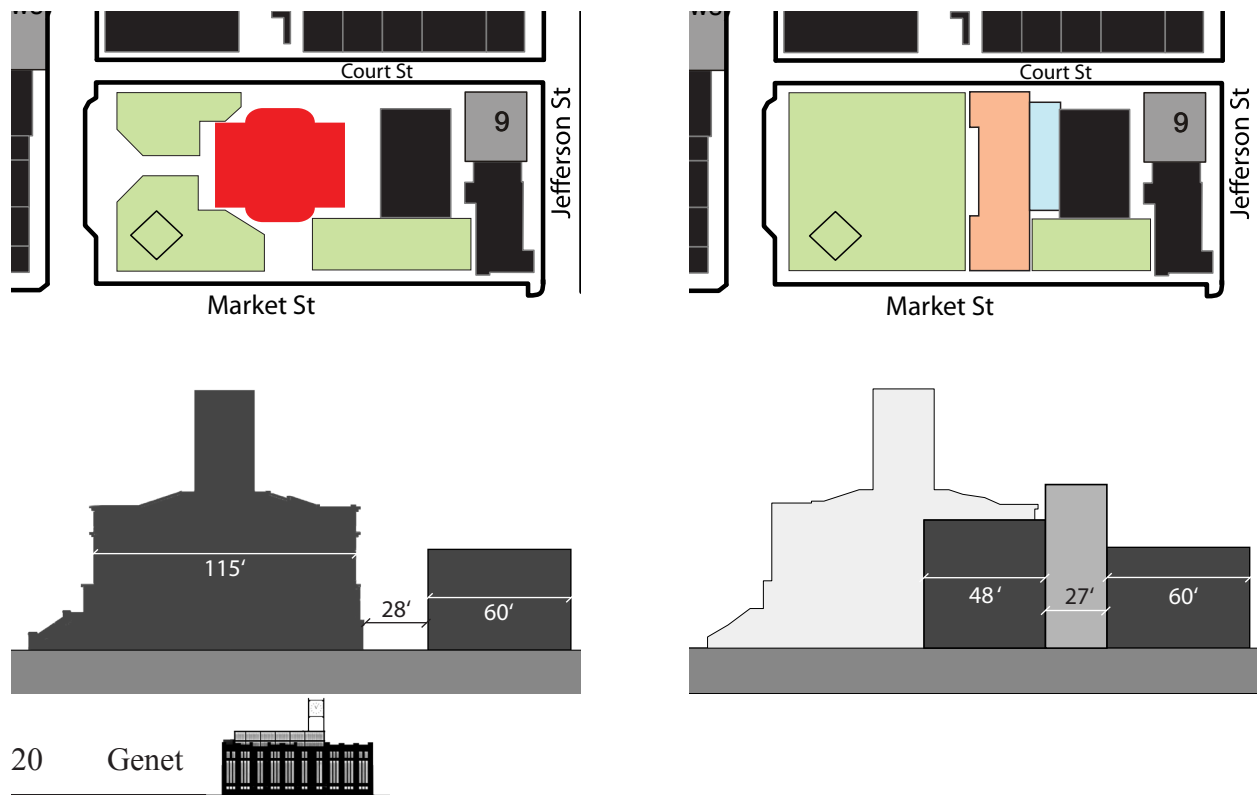


With respect to the other solutions, the site of the old courthouse is the most favorable, beginning with the fact that the old courthouse always stood there, so it makes sense that the courthouse continue to stand there. The site is on the two busiest streets in Tiffin, and is the natural center of the city. On part of that site stands the courthouse annex. Built less than 10 years ago, it was intended to complement a renovated courthouse, and would do the same for a new courthouse. This location would put all court functions in one place, in downtown, as they ought to be. Most local law offices are within a block of the site, as well as sufficient parking. Much has been said about the space becoming a downtown park, but right now that space is quite vast and undefined. Even with the old courthouse, the green space around it lacked definition. Constructing a new courthouse on that site could go a long way towards defining that space and bringing it down to an urban scale where it does not feel as vast and empty.

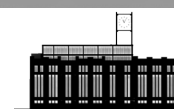


Building Form

The proposed courthouse stands in such close proximity to the annex that the two must work as a single unit both in function and aesthetics. Likewise, the former courthouse and the annex were in close proximity, and intended to work as one unit, yet they had different architectural styles. Rather than compete, the two styles complemented each fairly well. The new courthouse should develop its own architectural language so that it's not competing with the annex, nor trying to outdo the old courthouse. As the project has progressed, the proposed new courthouse is taller, longer, and thinner than the annex, and it uses different materials. The joint between these buildings becomes extremely important. If left open as an outdoor space, the space between the two buildings is likely too small and too isolated from major streets to be of any use, plus it does nothing to enhance the working relationship of two buildings. However, abutting the new courthouse right up against the new annex feels disrespectful to the annex, and it fails to acknowledge any joint between the two elements. It also blocks out day lighting for both buildings. The solution then is a semi-indoor atrium space that gently joins the two buildings, allowing them to function as one, while each building maintains its unique character. The final result is a three-element design that is unique from other courthouses in the state.



While developing the design for a new courthouse, I have found the strongest rationale for tearing down the old courthouse is that it was inefficient and uncomfortable; that much of the interior was dark, and either too hot or too cold, and poorly ventilated. It wasn't designed for air conditioning, and even with renovation, energy costs for heating, cooling, and lighting the courthouse would continue to be high. With that in mind, the new courthouse must be energy efficient and sustainable; in fact, it should approach carbon neutral. The first move is to give the building a thin profile, to maximize day lighting for interior spaces, and if possible, allow for passive ventilation, thus the building is only 48 feet wide from the west façade to the Atrium. The effectiveness of day lighting also increases as the building grows taller, and at four stories, the building sits above its neighbors. The building stretches the entire width of the block, with long sides facing east and west. This leaves most of the site open as a potential urban park, and it works most effectively with the neighboring buildings to define the visual boundaries of that urban space.





Neighboring buildings (must fill in the missing teeth)

The new courthouse will play a significant part in defining that aforementioned urban space, but this does not discount the role of neighboring buildings, which are necessary to create positive outdoor space¹⁵. From an aerial view of downtown Tiffin, one can see that most of the streets are fronted by buildings, but several downtown lots are left open, most likely for parking and other car-related reasons. These spaces appear as missing teeth, and ruin the density and continuity of downtown. One solution would be to fill in these spaces with either small town houses or apartments with small shops or offices on the first floor, creating a strong edge on every side of the urban space. Christopher Alexander identified this method as “housing in between,” stating that every part of a town should have permanent residents; non-residential areas are poorly maintained and often void of people without residents. Such homes could be desirable if the urban space becomes a safe park that serves as the yard for all nearby houses and apartments, where kids and adults alike can play games, enjoy a picnic, or just sit and relax.

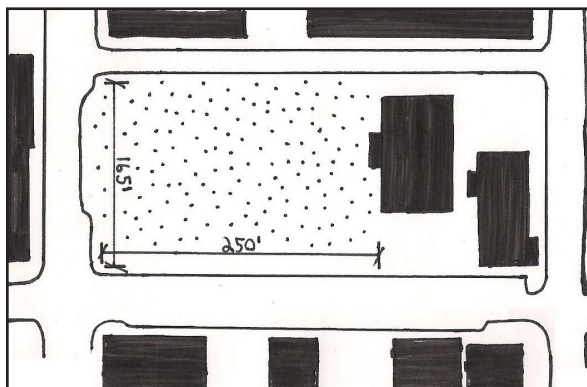
¹⁵ Christopher Alexander, *A Pattern Language* pg. 517

Park Design

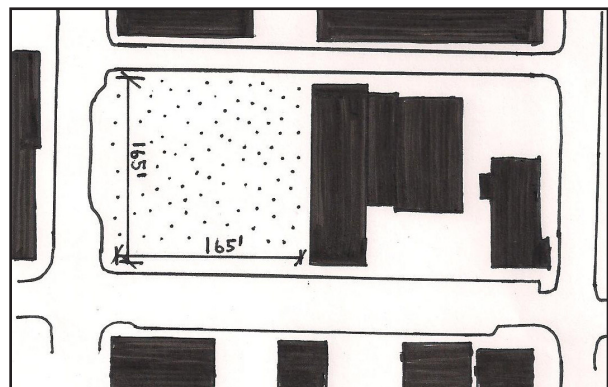
The former courthouse left a vast open space in its wake, perhaps too vast for a small downtown. Spaces that are too vast, like many urban plazas, become deserted, and then avoided. A general rule of thumb given by A Pattern Language is that a space will feel deserted when there are more than 300 square feet per person, and suggests that urban spaces be no more than 70 feet wide¹⁶. More than this, and people are too distant to interact. The area of 250 x 165 feet (not including sidewalks) means the space will need 138 people in it to not feel empty. However, the old courthouse rarely had more than 5 people outside of it at any given time. This says two things to me: that the site is large enough to support both an urban park and a new courthouse, and that a park must be designed to have a hierarchy of spaces so that it can handle a large number of people, but does not feel deserted on a daily basis. With the new courthouse on the site, the space is reduced down to a 165 x 165 square, which would need 91 people in order to feel full. This is far less than 138, but is still too high a number to be expected in Tiffin. Therefore, trees are then used to define small intimate spaces at the park's edge. One of these small spaces could feel full with only a few people, so that while the plaza as a whole may feel empty, at the same time many small spaces could feel very lively.

¹⁶ Christopher Alexander, A Pattern Language pg. 312

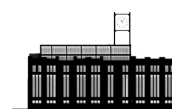
There is room for both a park and a new courthouse

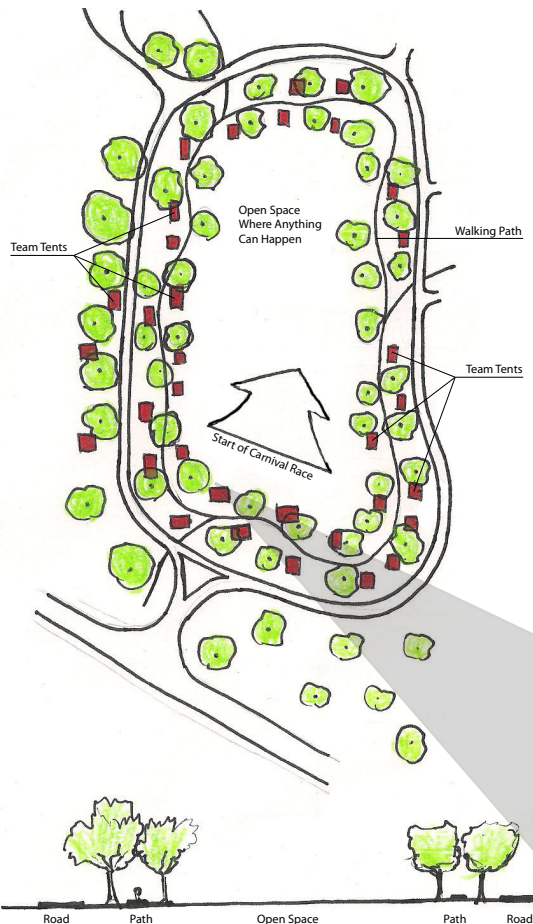
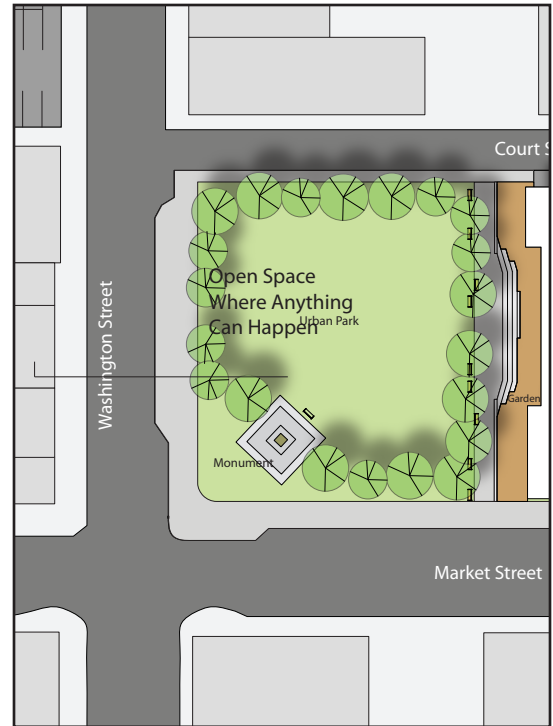
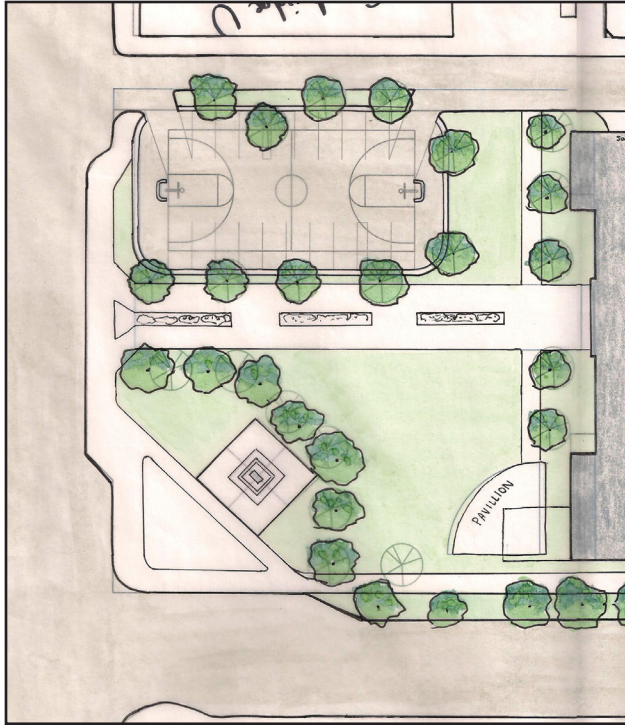


138 People
300 sq ft per person



91 People
300 sq ft per person



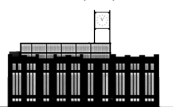
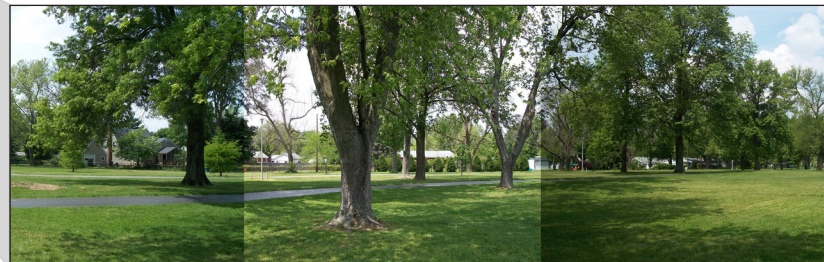


(Above Left) Example of Overdesigned Park: the park is trying to do too many things at once, a monumental central axis, a music pavillion, parking lot/basketball court...etc. The park has no flexibility other than very definite uses.

(Above) Simplified Park: it can be anything it wants to be

(Left) Hedges Boyer Park on Carnival Weekend. The park, with its massive open space, has the flexibility to be used for anything.

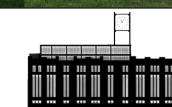
(Below) Panorama of Hedges Boyer Park from the south side of the lawn



In designing a park for an urban space, the architect must be careful and avoid overdesigning. It can be easy to take a large open space and design a formal arrangement of paths with a monument or landmark in the middle. But in some ways, this could be the worst thing to do. Just as a basketball court is difficult to use if a large obstacle sat in the middle of half-court, a central monument and paths divide a park into several small spaces that struggle to work together. It is most important that the space remain flexible and open to any activity, such as an outdoor concert, farmer's market, or just throwing a Frisbee.

On the other hand, the entire space cannot be left completely bare, because there would be no separation between the busy street and the plaza, and because a statue of Tiffin's most famous citizen, William Harvey Gibson, already stands on the southwest corner of the site. This statue then becomes integral to the park design. A soft barrier, in the form of a ring of trees is placed around the edges to help shield from street traffic and provide more enclosure with the statue filling in the void in the ring. This edge of trees help creates smaller spaces and pockets of activity at the edges, where people may gather and sit down in a space that is a much more comfortable scale, such as the Gibson Statue. Meanwhile, their activities could spill out into that open space in the middle.

There is already an example of this in Tiffin's own Hedges Boyer Park, though it is at a much larger scale. Encircling a large undefined open lawn is a tree covered path and beyond that is the road. The edge, with the trees and path, is where most visitors run walk and sit, where most of the activity happens, where all the tents are set up on cross country carnival weekend. Meanwhile the central lawn is a space where kids play, the 300 runner cross country race starts, and people sit down to watch Fourth of July fireworks.

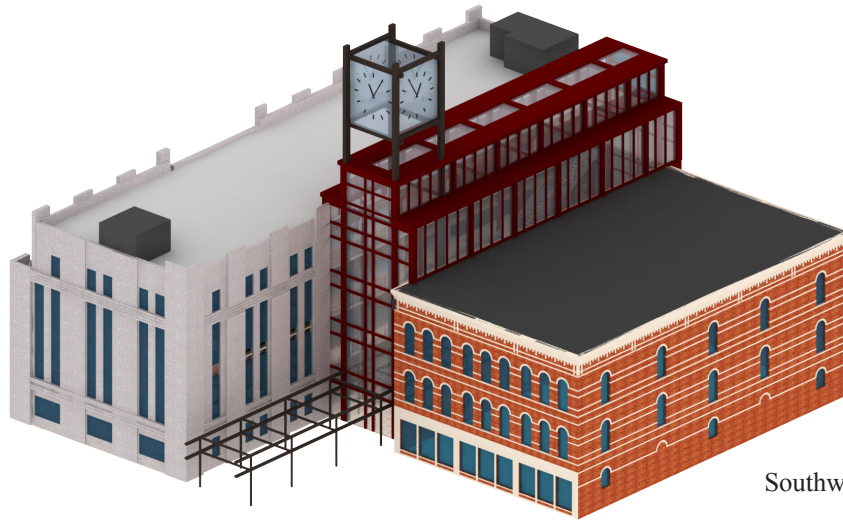


Height (Four stories)

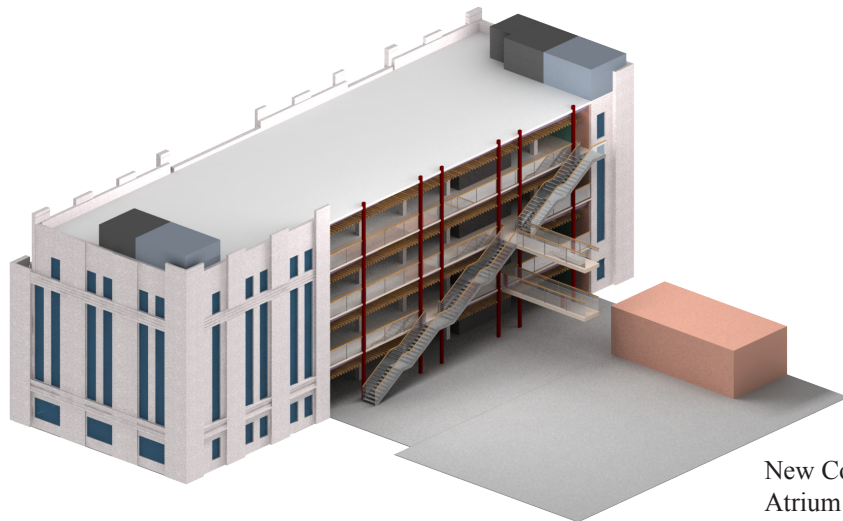
Because the building maintains a thin profile, it was necessary to make the courthouse four stories in order to match the square footage of the former courthouse. But the new courthouse reaches four stories for many other reasons as well. Most of the nearby downtown buildings, including the adjacent annex, reach two or three stories. By making the courthouse 4 stories, with the ability to expand to 5 stories, it reiterates the courthouse's dominant presence in downtown Tiffin. The program of the old courthouse would still be able to fit on the first three floors: county clerk of courts at grade level, courtrooms and their supporting spaces on floors two and three, which leaves the top floor open to any type of government office that needs a home, such as the county commissioners, county engineer, and county sheriff. Still, the building could grow taller if it needs to, without compromising its architecture.

Atrium

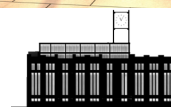
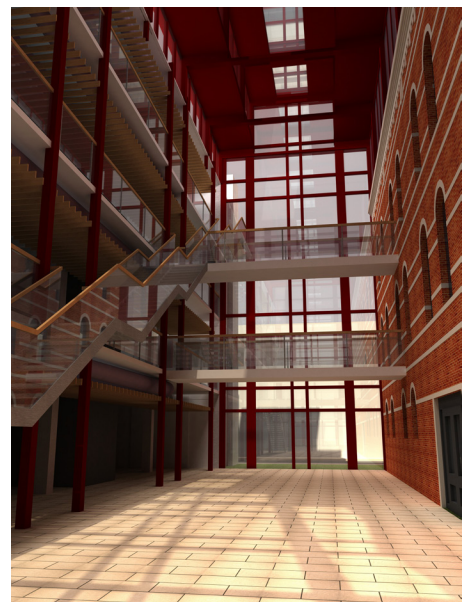
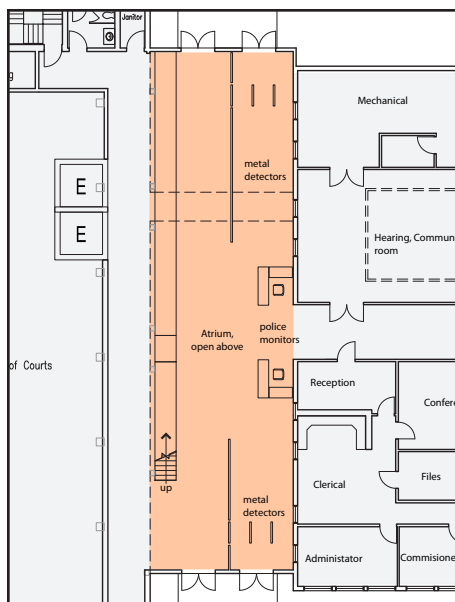
The atrium, connecting the new courthouse with the annex should be a well-daylit, semi-open air space that has its own architectural language apart from the other two buildings. The space should be narrow for cost purposes, but it must be wide enough and transparent enough that natural light can still penetrate deep within each building on atrium side. The atrium is 27 feet from the circulation corridor of the new courthouse to the edge of the annex, but this width can be changed. Except for a slight offset on each end, the atrium runs the entire length of the annex, approximately 100 feet long. While the corridors of the new courthouse open directly into this space, the west façade of the annex keeps its exterior finish and windows, and is visually unobstructed. A set of monumental stairs run along the entire length of the atrium, giving direct access to every floor of the courthouse without upsetting the openness and continuity of the atrium space. The atrium space will be much more than just the leftover space between buildings; for example, it could be an exhibition space, a lecture space, or a performance space. Also, since it can be completely shut off from the courtroom spaces, the space could be rented out for private events outside of business hours.



Southwest Axon



New Courthouse and
Atrium interior

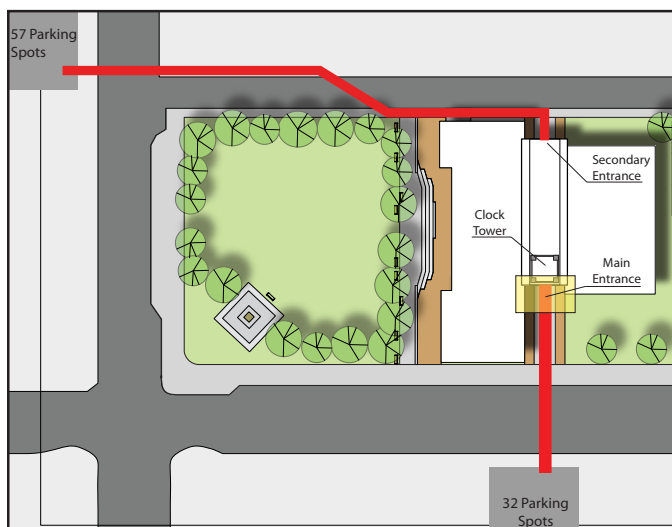


Main Entrance

In A Pattern Language Christopher Alexander states that “placing the main entrance(s) is perhaps the single most important step one takes during the evolution of a building plan.”¹⁷ First of all, the entrance must be visible the moment the building comes into view, and second, it must have a distinct shape to differentiate it from the rest of the building. Common Pleas Judge Kelbley stated another characteristic which the courthouse must meet: the building must be secure; therefore, any public entrance must be controlled¹⁸. Other influences on the placement of the entrance are that the annex and new courthouse should be equally accessible; and most people will approach the building from the parking lot across Market Street or from the sidewalks. With all this in mind, it makes the most sense that the main entrance is placed at the south end of the atrium, with the secondary public entrance placed at the north end of the atrium. This allows the atrium to act as the entrance vestibule that all visitors must pass through, whether they approach from the north or south, before entering any courtroom or county office space. This also allows the entrance to be monitored by a single police officer. The main entrance is marked by placing the clock tower directly over top the south end of the atrium, thus the main entrance has a landmark that is visible from all approaches.

¹⁷ Christopher Alexander, A Pattern Language pg 540

¹⁸ Interview with Judge Kelbley

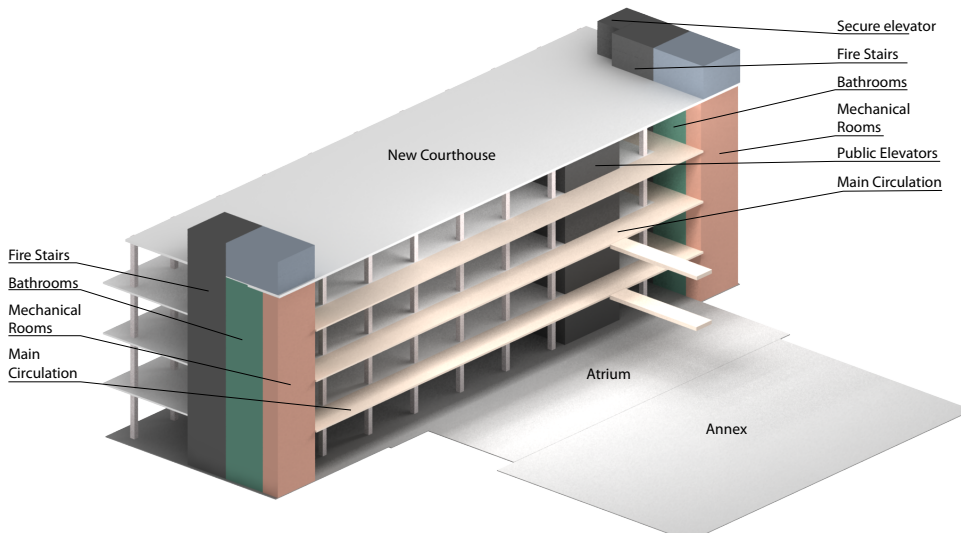
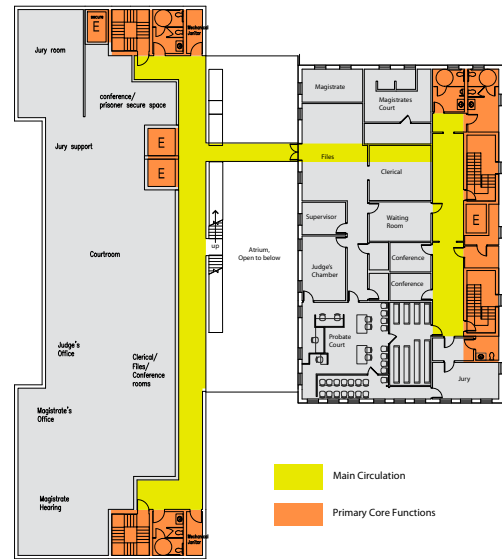
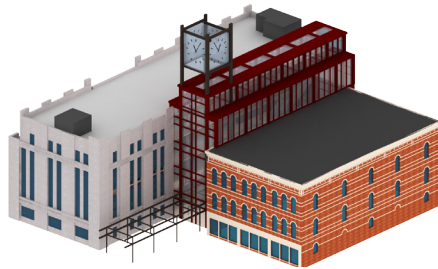


The main entrance is directly across from what is currently the primary courthouse lot, those in the next closest public lot will likely walk down Court street to the secondary entrance



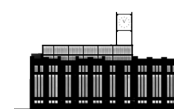
The southside main entrance





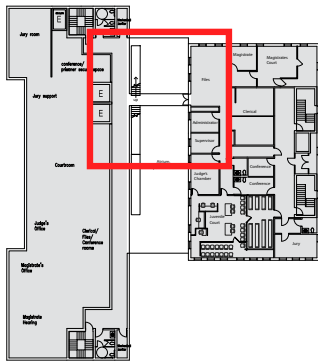
Main Circulation and Building Core

The main circulation and the building core (above) are designed as permanent spaces. While the main circulation can be transparent, the mechanical rooms, bathrooms, elevators and stairs are opaque by necessity; thus most of these functions are congregated at the far ends of the building. This allows the strongest visual connection from the courts and county office space to the atrium and the annex. The exception is the elevator placement. Although the elevators take away part of the courtroom space, they are at a location more central to the new courthouse, and the entire complex, at the point of the second and third floor connections to the annex.

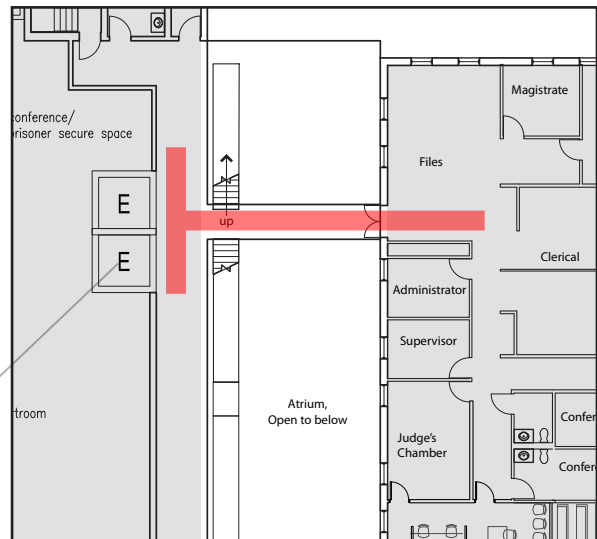


Connections to the Annex

While the new courthouse connects to the existing annex at the ground level, much like what was planned for the old courthouse, it is perhaps desirable that the two buildings connect at two or all three levels. While the first floor entrance to the annex remains unchanged, the connections on the second and third floors are made at what are now file rooms, rather than the center of the building. This is deemed the least disruptive connection, because of the move towards digital files, a file room is the courthouse space most easily compromised to satisfy circulation needs. As mentioned earlier, the elevators of the new courthouse are placed at this connection point, which inevitably will be the primary node of the second and third floors.



The connection is made at the file room, to be least disruptive to the existing floor plan. This becomes the central node on each floor, and is the most logical spot for the public elevators.



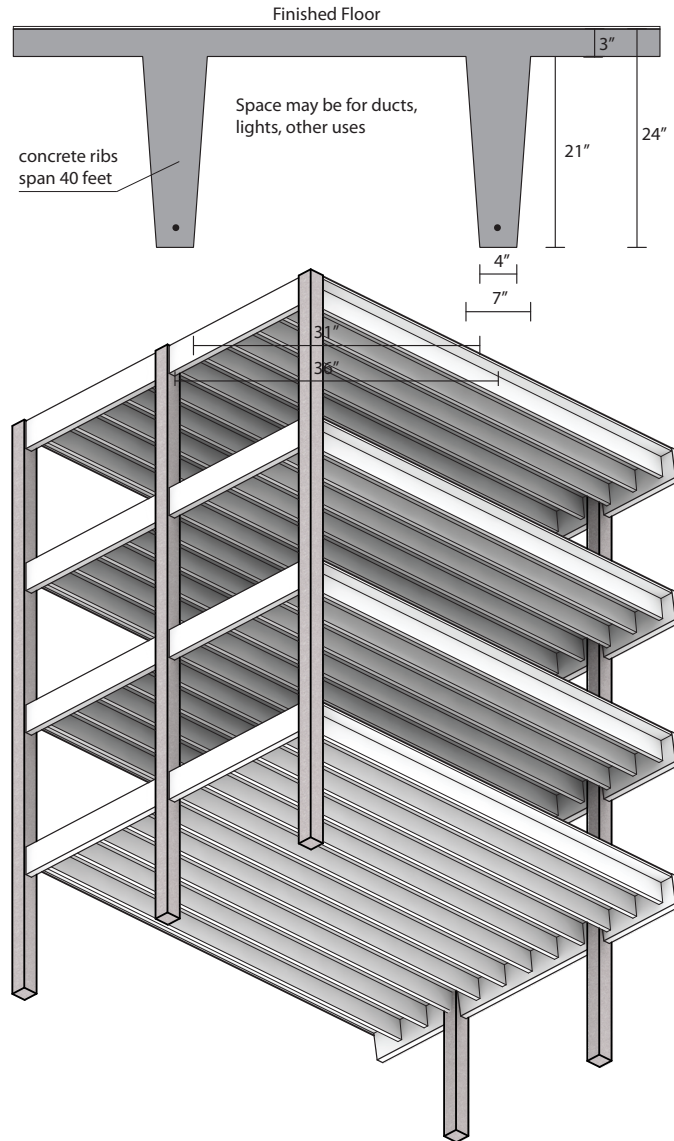
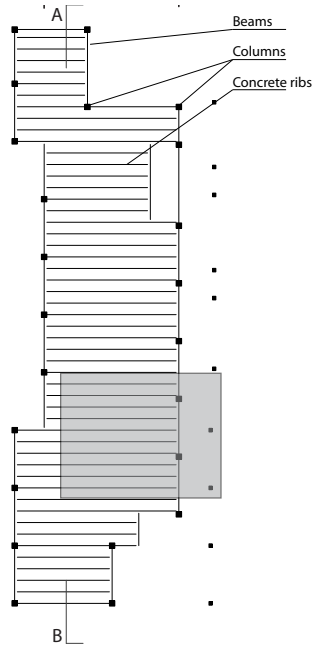
Structure of the New Courthouse

Two rows of concrete columns, spaced 40 feet apart, make up the primary vertical structure for the courthouse. Between them, a concrete one-way slab spans the entire 40 feet, allowing the interior, other than the core, to maintain an a completely open floor plan. This permits interior spaces to change and evolve, without encountering any concerns with the building's structure, thus ensuring the new courthouse can remain occupied by any type of function100 years down the road. In the atrium, and clock tower, a steel structure is used to create lightness in between two rather heavy buildings (the new courthouse and the annex).

(right) Section through two of the concrete ribs that make up the one-way slab and span 40 feet

(below right) Partial axon from below, showing the concrete ribs spanning 40 feet on each level

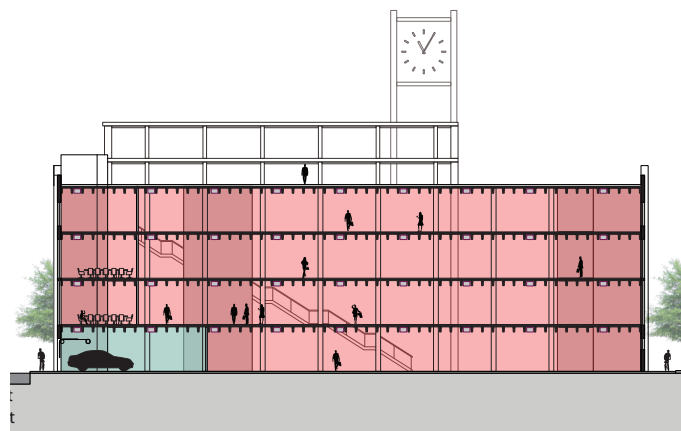
(below) Structural floor plan



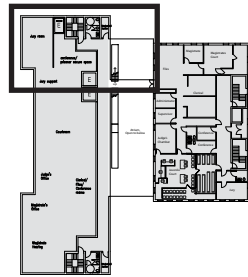
Open Floor Plan

The building must have the ability to evolve, and to be whatever it needs to be. Theoretically, 50 years down the road, the courtroom as we know it may be obsolete. Therefore, the new courthouse floor plan will be designed with flexibility in mind, much like most office buildings. Because the one-way floor slab spans

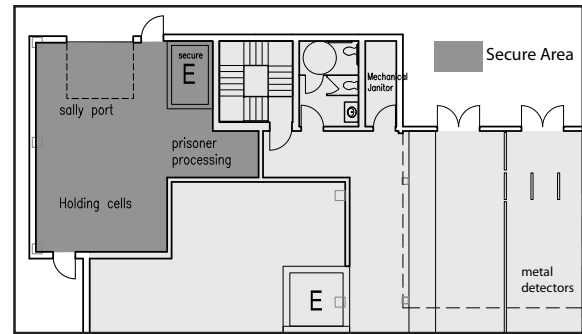
(bottom) Section Looking East, with no interior structural members, the floor plan to be completely open and flexible



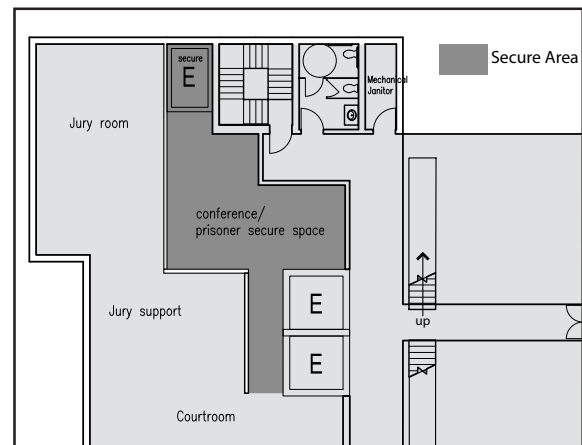
the entire 40 foot distance between the two major column lines, no structural interior walls or columns occur within the courthouse space. This way, depending on the program, interior partitions can be placed anywhere just as easily as they can all be taken out, and that space may be arranged and rearranged any number of times.



(right) a small elevator allows for a multistory secure area so that defendants can go from police car to the courtroom without entering a public space

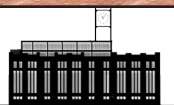


First Floor



Third Floor

West Facade from Washington Street and across the park



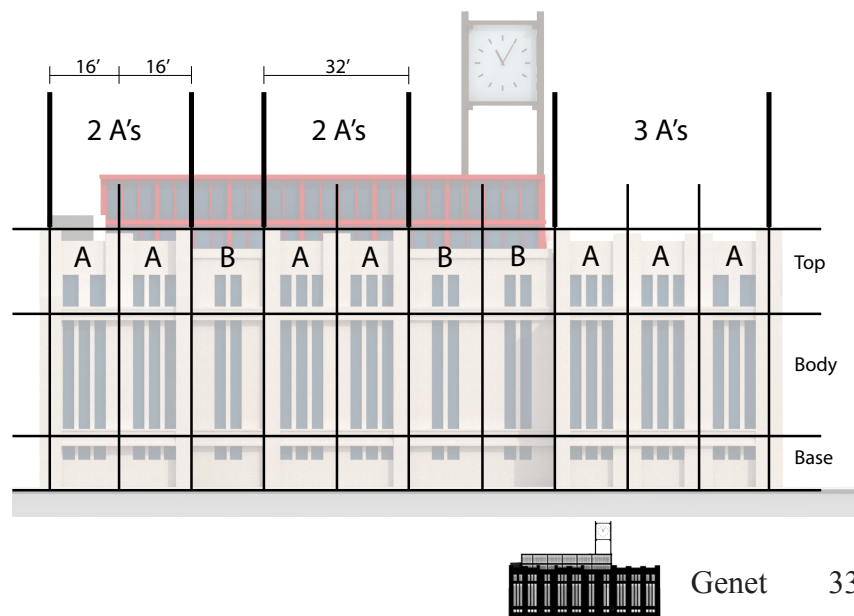
Sally Port and Separate Elevators

During discussion with Seneca Common Pleas Judge Kelbley, he emphasized that a new courthouse needs a sally port garage entry so that defendants could be brought into the building in a secure space completely separate from the public areas. This stems from two things: the county jail, which was once adjacent to the courthouse, relocated 15 years ago to a new location 3.5 miles away; and with the reliance on automobiles, defendants are almost exclusively brought to court by car. A sally port garage ensures that from the jail to the courtroom, defendants will never have to be escorted through a public space. Next to the sally port is one half of the building's core, along with a small elevator, ensuring that defendants can travel floor to floor and use the facilities while remaining in a secure space.

Façade Design

The Façade of the new courthouse follows several architecture patterns prevalent among Ohio courthouses, such as tripartite design and the use of a repetitive grid. Tripartite design is expressed through the façade which features a distinct base, middle, and top, a very common design method. Horizontal breaks in the façade between the first and second floors, and the third and fourth floors help define the three sections. The grid becomes clear as the west façade, which faces the park, is broken up lengthwise into ten 16-foot bays, each with either a pair or a trio of tall vertical apertures. The

trios of windows highlight the location of the courtrooms as well as the two protruding ends of the building. In addition, the arrangement of trios and pairs of apertures convey asymmetrical balance.



¹⁹ Interview with Judge Kelbley

Material Choice

To strengthen the new courthouse as an entity unique from the annex, the exterior will be limestone rather than the brick which is prevalent in downtown Tiffin. Stone conveys strength, heaviness, and importance, very well, and I feel the courthouse must represent a pillar of strength and stability around which the city government and justice system can rally. The single material choice of the new courthouse relates to, but does not copy, the old courthouse, which was clad entirely in sandstone. However, technology means that limestone does not have to be applied in the same way it is applied to the former courthouse. The walls are not load bearing, which mean 2-inch-thick limestone panels are applied the same way brick is applied to the exterior of contemporary buildings¹⁸. Also, multiple limestone quarries are within an hour of the city, so cost of limestone construction should be reasonable.

The annex, clad in brick, and the new courthouse, clad in limestone, both express themselves as heavy buildings. The joint between the two buildings, which is a transition between the two buildings and outside, should therefore feel light and airy. Here, the industrial history of the city as a producer of Tiffin glass and machinery parts shows clear through the atrium which is constructed entirely of steel and glass and rests gently between two very heavy monolithic structures. The clock tower, also made of glass and steel, rises out of the central atrium high above the entire facility, but with equal respect to the new courthouse and the annex.

Windows

The decision to use tall thin windows has many sources. In the late 1800s and early 1900s, when most of the buildings in downtown Tiffin were built, including the old courthouse, technology limited horizontal spans and tall thin windows necessary to daylight interior space. The use of tall thin windows relates to this pattern in downtown Tiffin. In addition, a tall thin window allows daylight to penetrate deep within a building without sacrificing a great deal of the thermal envelope, helping reduce heat loss or heat gain, and reducing the need for electrical lighting. Also, the emphasis on verticality gives the courthouse more of an urban feel, whereas horizontal windows would make the courthouse feel suburban, as if the building is sprawling.

²⁰ Dan Woodfin, advisory meeting



<http://www.urbanohio.com/forum2/index.php?topic=13139.0>



<http://www.clevelandquarries.com/content/historical->



<http://www.toledoblade.com/frontpage/2007/07/16/Tiffin-workers-discover-limits-of-WARN-Act.html>



<http://www.suziemax.com/Cherokee-Rose.html>

Materials Civil War museum (top left) and the former courthouse (top right): monumental buildings that use limestone and sandstone. Steel and glass represent Tiffin's industry including National Machinery (above left) and Tiffin Glass (above right)

Windows (below) Tall windows are a common trait among older buildings in downtown Tiffin

<http://www.urbanohio.com/forum2/index.php?topic=13139.0>

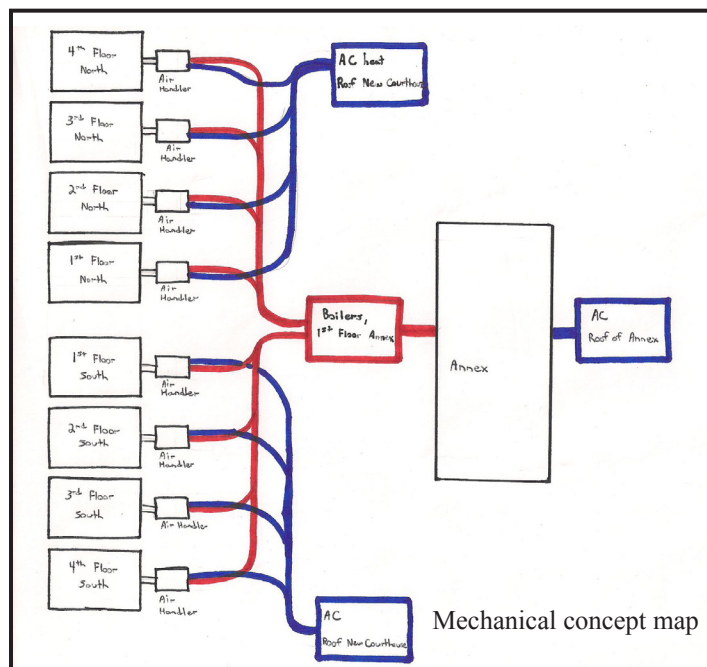


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Mechanical Systems

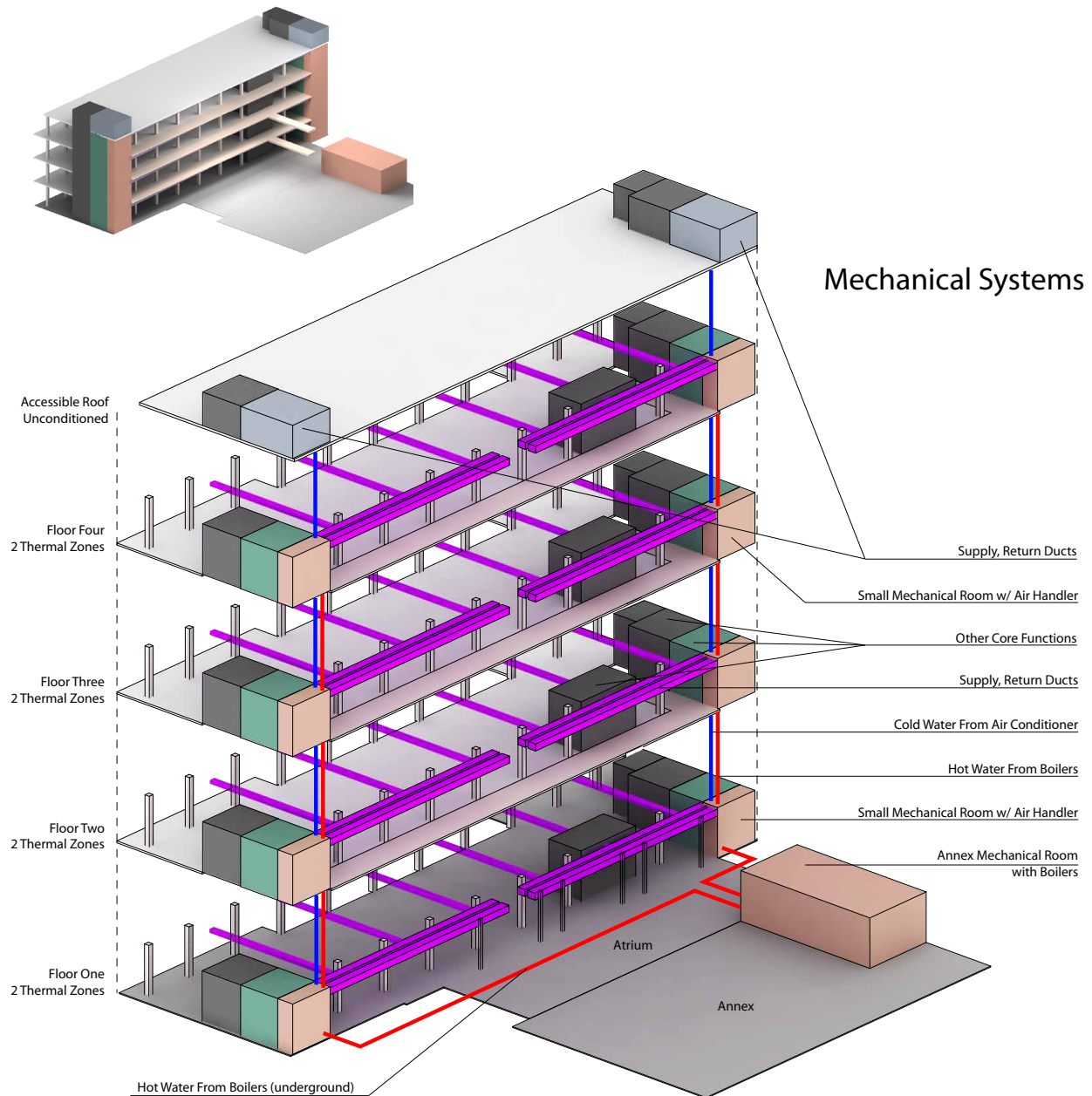
In talking with Judge Kelbley, he put emphasis on well conditioned space within a courthouse. Except for the atrium, this reduces the potential of passive ventilation in most spaces, and forces reliance on mechanical systems. The large mechanical space on the first floor of the annex was designed with the intention that its boilers serve both annex and the renovated courthouse. It makes sense to link the heating system of the new court with the existing boilers already designed to handle the load. A system of hot water pipes would transfer this heat energy to fan coils and air handlers of the new building so both buildings would be heated from one existing system. I have opted for eight small air handlers for the new courthouse, two on each floor, each covering half a floor level, or the approximate area of a large house (3000 sq ft). I believe this to be a far less expensive option than a single large air handler, plus it eliminates the need for a large mechanical room and massive ducts. In addition, this system of air handlers would be easier to maintain, should one malfunction, the other seven would still be working, and fixing it would be no more complicated than a fixing a home unit. Air conditioning units and heat exchangers would still have to go on the roof of the new courthouse, just as they already are at the annex.



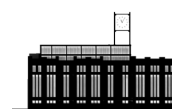
Thermal Zones

The atrium between the two buildings is intended as its own thermal zone, and does not figure as conditioned space. Conditioning such a space in winter and during summer requires a massive system and would be incredibly expensive. Instead, the atrium intended as an open air space in the summer and as a large vestibule in the winter, and





would not be conditioned beyond localized infrared space heaters and fans. This space could be 10-12 degrees warmer in the summer or 20 degrees colder in the winter, as compared with the rest of the building, which is OK, because it is only circulation space. The corridor overlooking the atrium space is included in this thermal zone. All the work spaces and courtrooms, however, are well ventilated and kept near constant temperature by the active system found at the end of each floor. Meanwhile, the annex can remain as its own thermal zone, as it is today.



Clock Tower (Landmark)

As mentioned before, the clock tower stands above the atrium between two heavy buildings, the annex and the new courthouse, and as a result, no building is favored more than the other. The clock tower is made entirely of glass and steel, like the atrium, and is another symbol of Tiffin's industrial heritage. It is important that the clock tower develop a unique design language, rather than imitate one of the towers from the old courthouse. Otherwise, doing this simply means placing a classical element over top a contemporary structure; the two styles will clash. Instead, the tower celebrates Tiffin industry and relates directly to the architecture of the atrium and the entire building. The tower, which rises to 110 feet, will be what people see above everything else when they arrive in downtown.

It is important that Seneca County acknowledge Tiffin's history as an industrial city, but more significantly, show that it has moved on from the old courthouse and is progressing to a successful future.

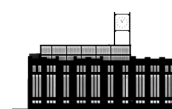


Conclusion

In moving towards a successful future, Tiffin must realize that a perfect solution to the courthouse situation will never be found. No courthouse will completely satisfy all Seneca County citizens, nor will any courthouse be fair to all surrounding buildings. What I am proposing in this project is merely a suggestion, one way to resolve the needs of the county and the city, and one way to use the vacant space on which the courthouse once stood. This is far from the only course of action that could be taken by the city and county. However, I feel my project is grounded in many logical methods and ideas that people with no background in architecture can understand and may agree with. If this project becomes reality and the new courthouse is built in this form, I think Tiffin will have a practical and beautiful solution all county citizens may come to appreciate.

Reflection

This project has been a fantastic experience ever since its beginning, and will continue to be so into the foreseeable future. For the first time in college, I've done a project where I set the requirements, picked the site, and designed the program. Likewise, I have been solely responsible for pacing myself and completing every detail. Yes, I have been advised, but nobody has told me what to do, and the responsibility to complete a project above and beyond the typical class schedule has been very rewarding. I have learned more about courthouse design than I thought I ever could. I have also had the pleasure to talk about the project with numerous citizens, who are intrigued with the idea of a new courthouse after all the attention paid to the old courthouse. On Sunday, April 15, the local paper published a front page article about my project and included two renderings. I have heard nothing but positive remarks from locals who read about the project for the first time in the paper. It is responses like these that inspire me to complete this project at a high level of refinement, and to someday present it to the city of Tiffin. I hope this project will act as a springboard towards the design and completion of a new courthouse, and a new beginning for downtown Tiffin.



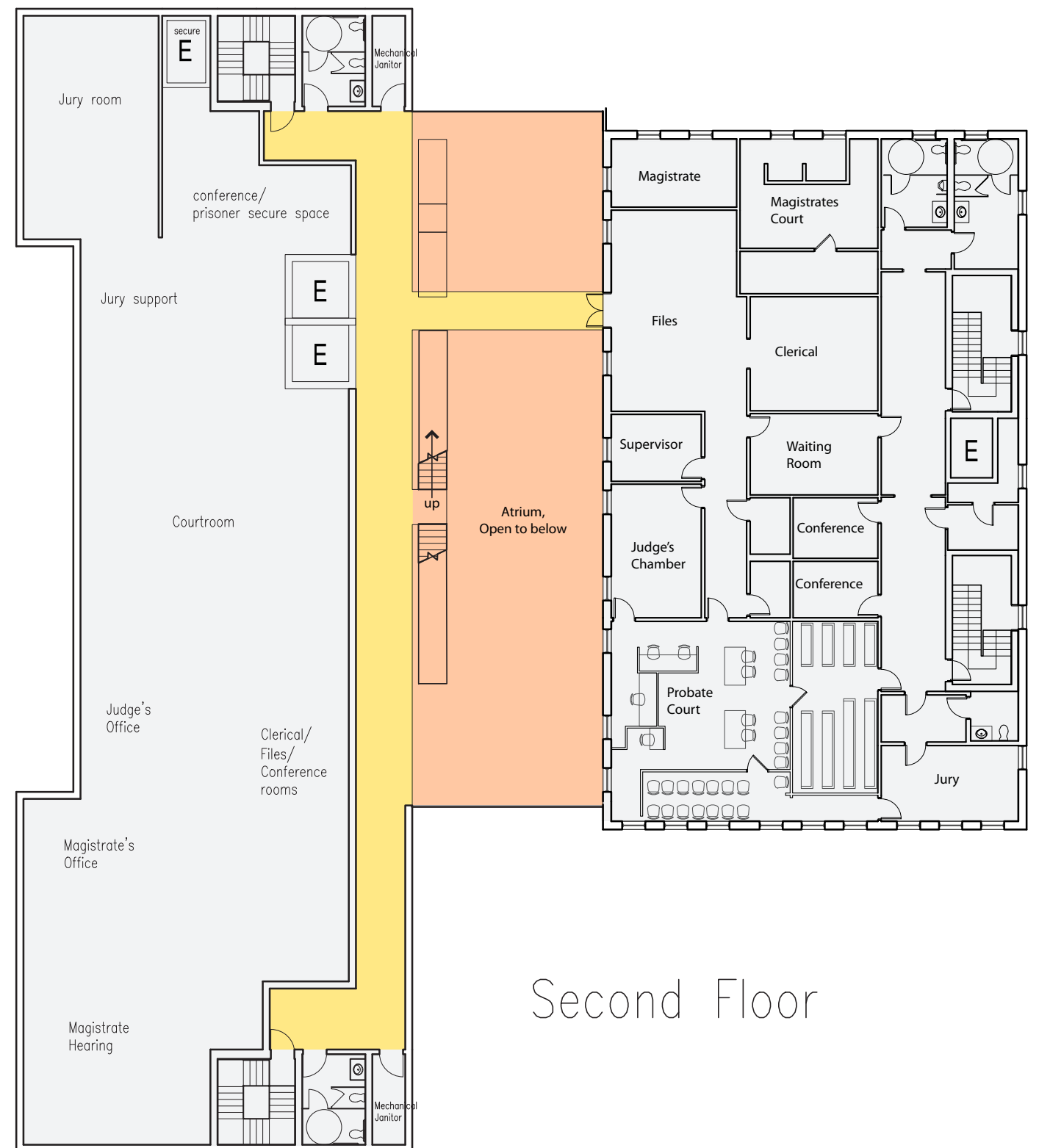
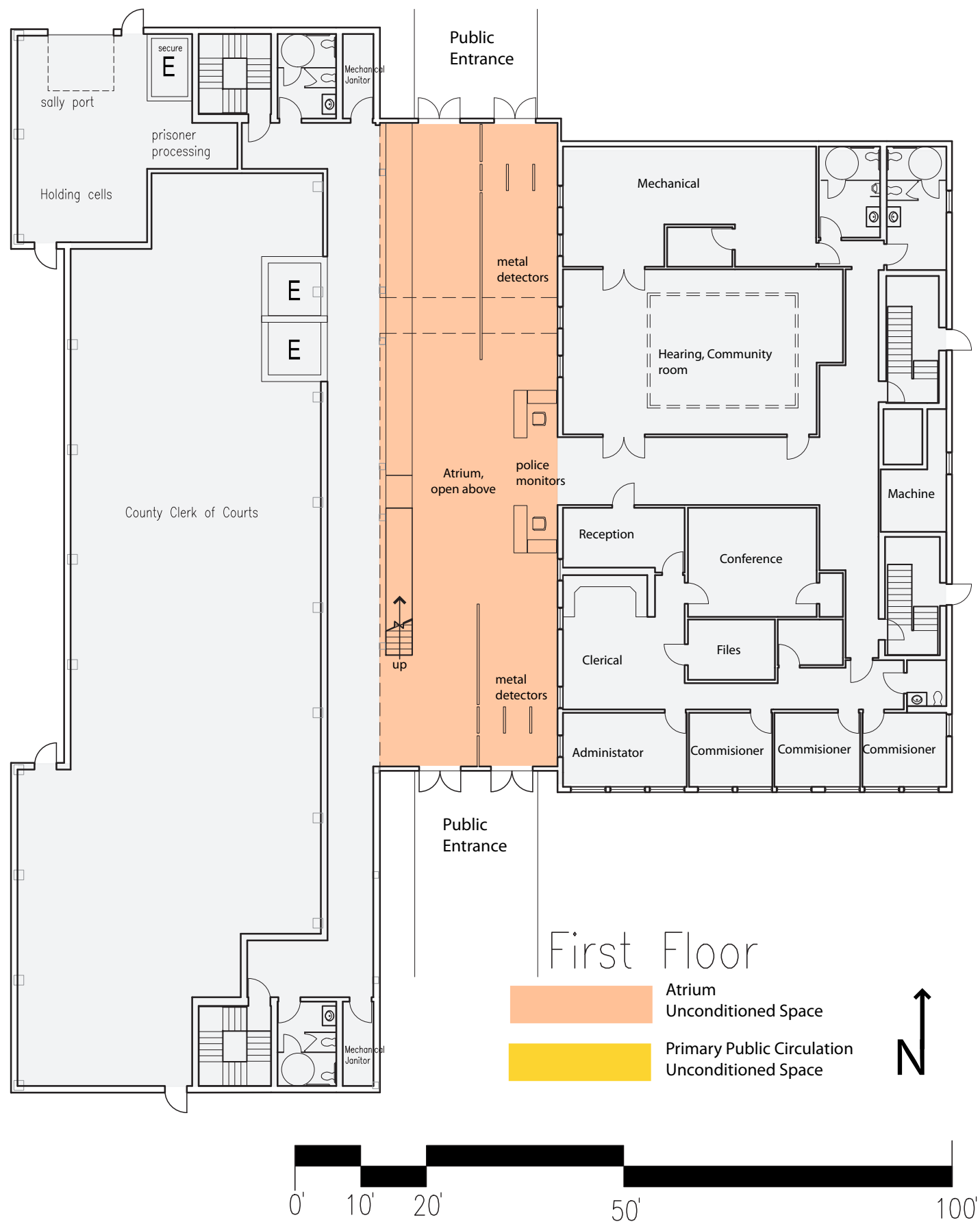
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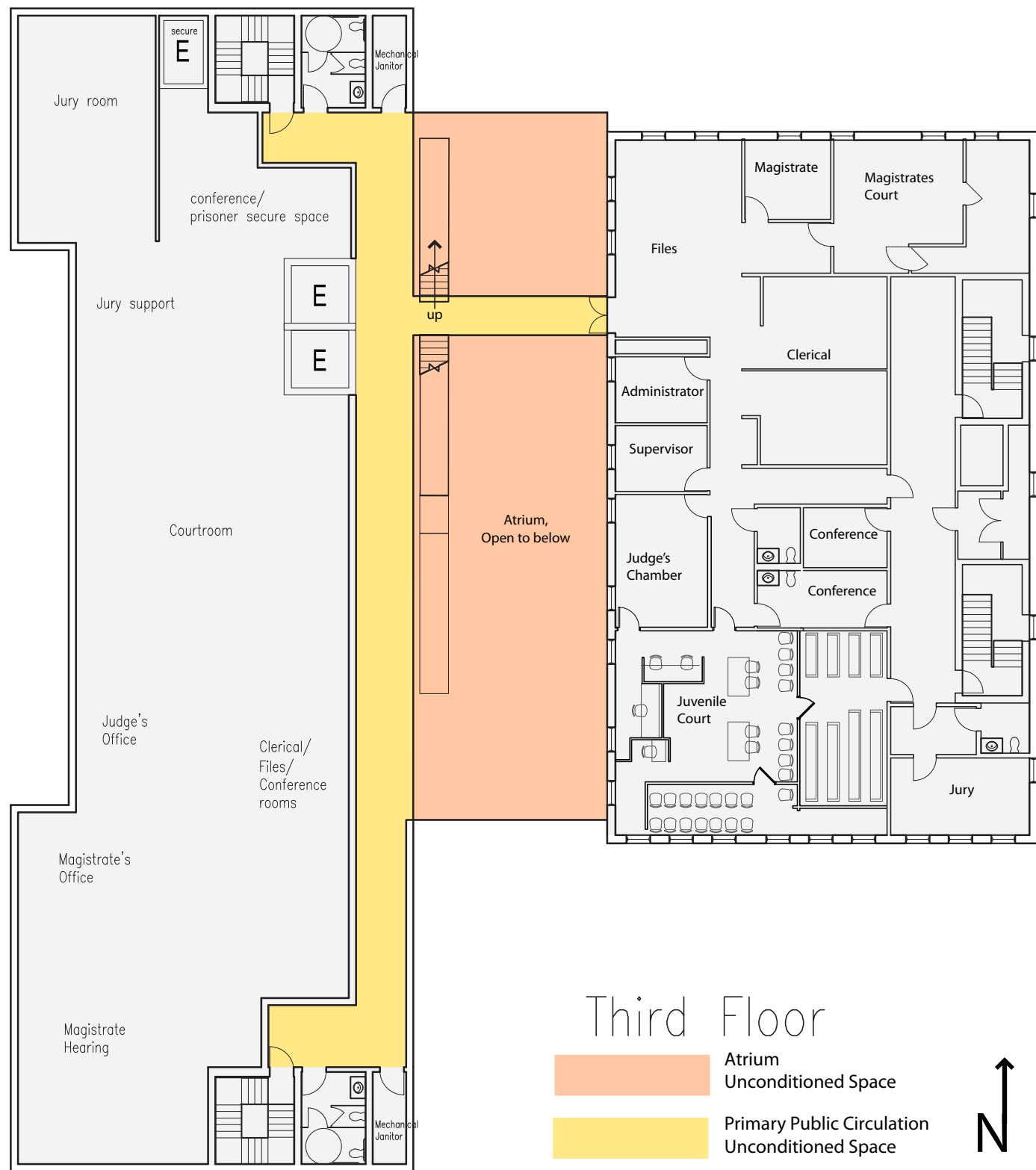
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Site Plan 1:40

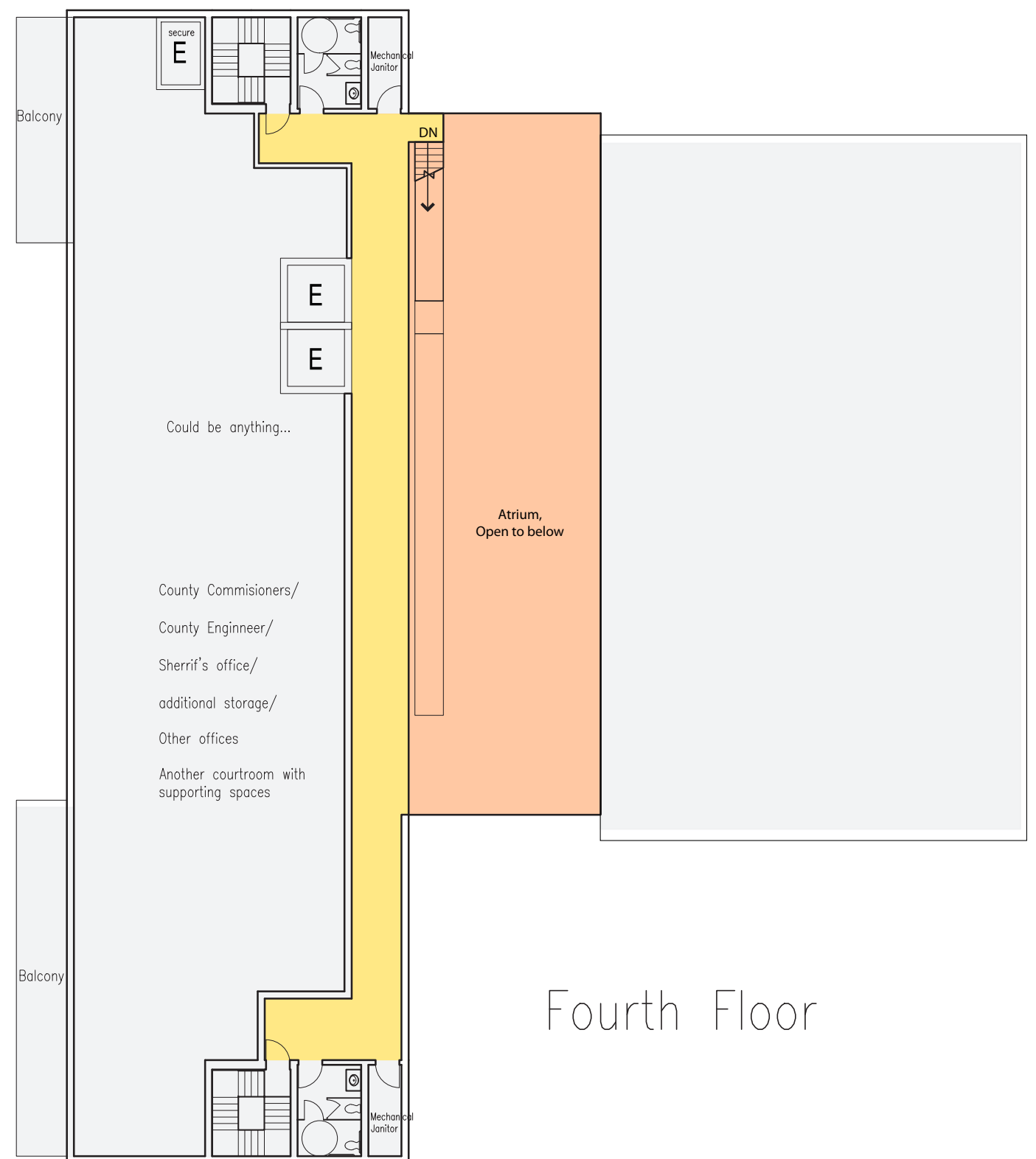
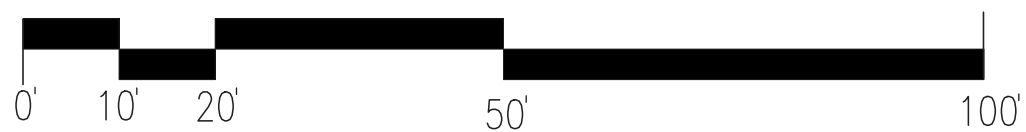




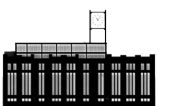


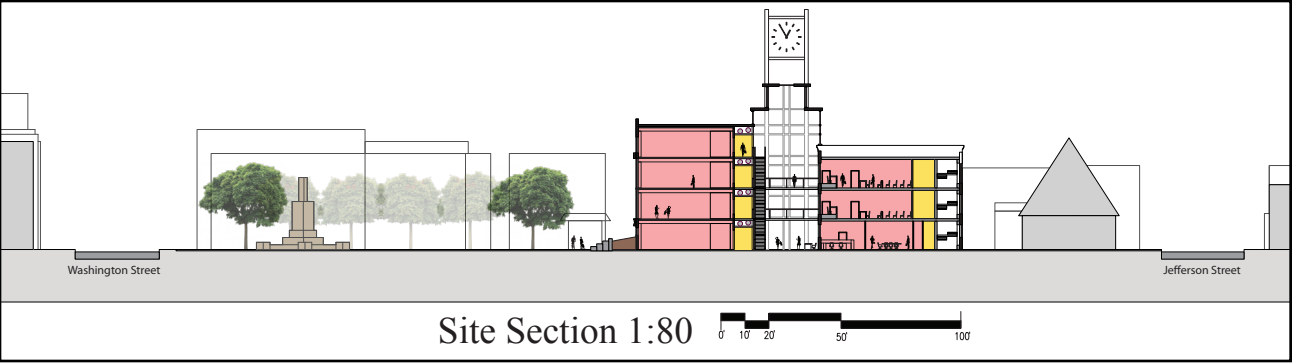
Third Floor

- Atrium
Unconditioned Space
- Primary Public Circulation
Unconditioned Space

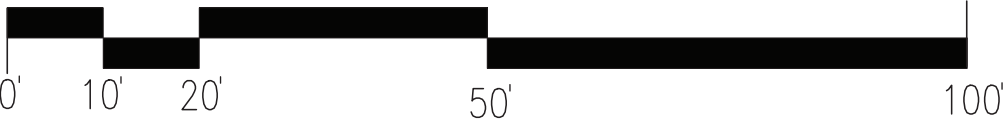


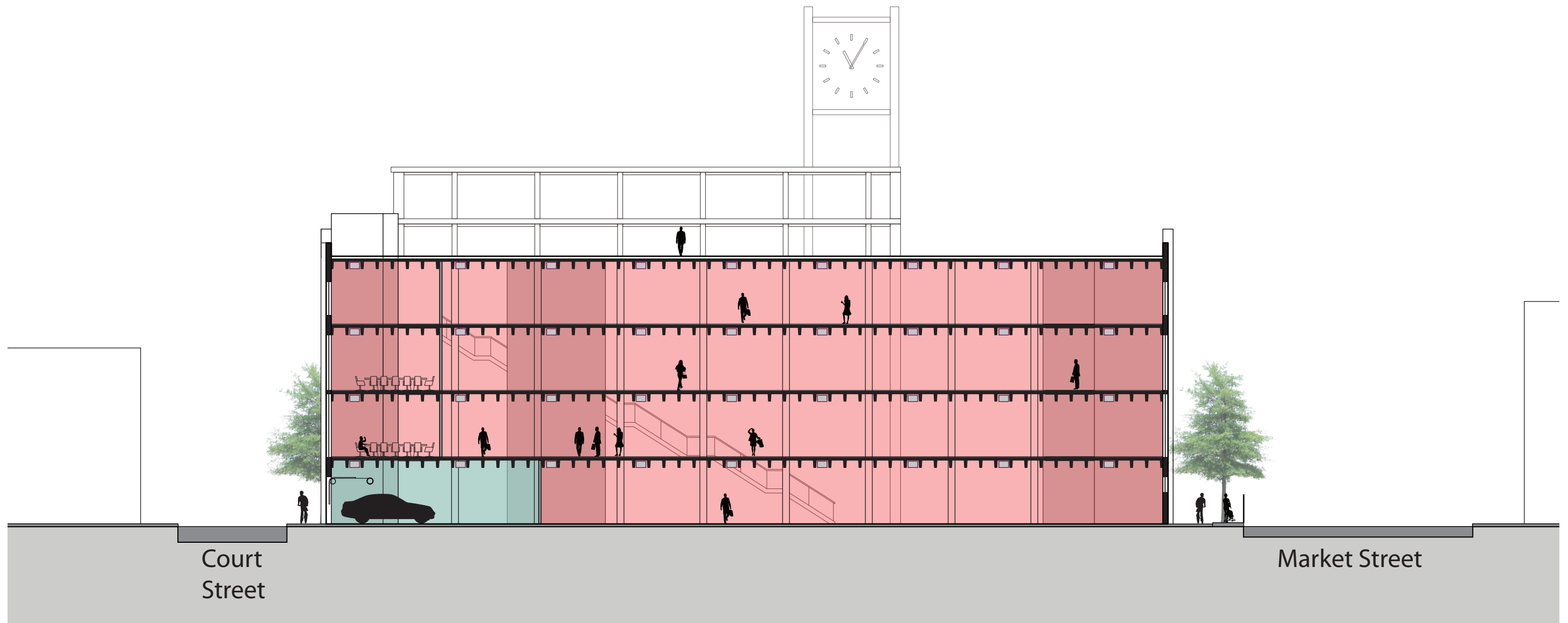
Fourth Floor



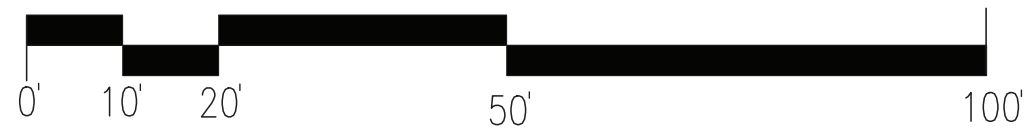


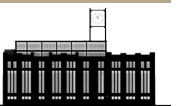
Section Looking North





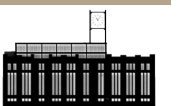
Section Looking East

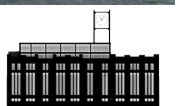






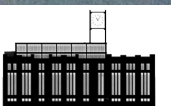
From the Corner of
Jefferson and Market





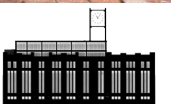


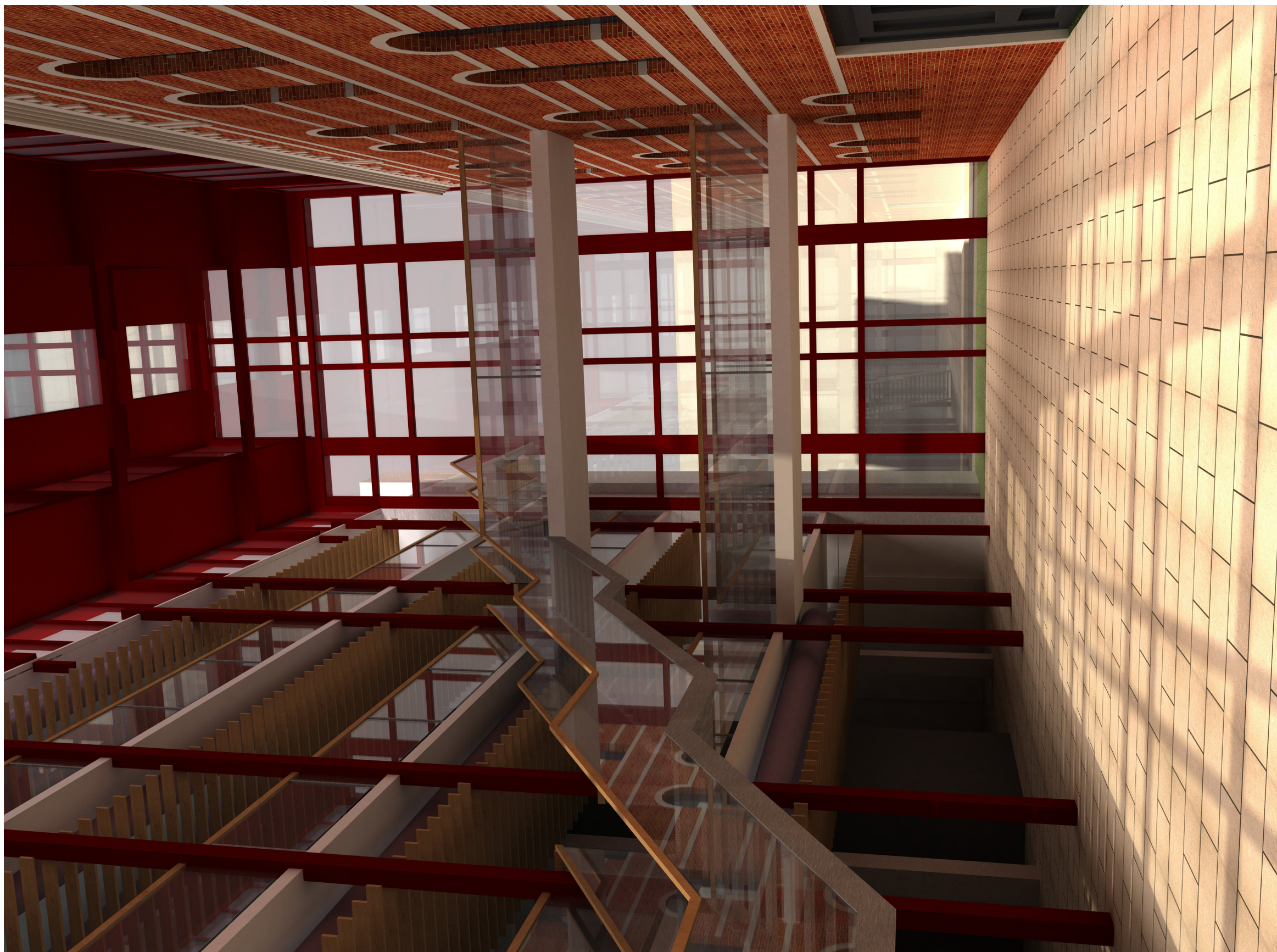
Directly across Washington St
from the park and the courthouse





Landscaped walk on the side of the
courthouse facing the park





Atrium space between the annex
and the new courthouse
from just inside the main south side entrance

